

IDEOLOGY AND RHETORIC IN THE TEXTBOOK PRESENTATION
OF MAINSTREAM ECONOMICS: THE CASE
OF SAMUELSON'S "ECONOMICS"

by

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ABSTRACT

Mainstream economic science has a conservative and liberal disposition which overlooks contrasting schools of thought. This propensity, conceivably, would be reflected in the textbooks. Hence, the main objective of this dissertation is to study the ideological underpinnings of introductory economics textbooks. To make a case for ideological bias in the textbooks, 19 editions of Samuelson's *Economics*, which is the regarded as the consensus textbook, are surveyed in a selective manner. It is assumed that if there is an overall ideological bias towards the left-wing economic thinking, then the bias would be more pronounced on the radical segments of the spectrum. Thus, the reading is focused on Samuelson's treatment of Karl Marx, Marxism, socialism, and so on. Drawing from critical discourse analysis (CDA) literature, both quantitative and qualitative analysis methods are employed. Strong arguments are shown for the existence of ideological bias. Levels of biased treatment are analyzed during four time periods (1948–1970, 1973–1980, 1985–1992, and 1995–2010). Also, it is shown that Samuelson's presentation of radical economic perspectives is very sensitive to the political context.

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PREFACE

Standardization of economics textbooks, in conjunction with publishers' increasing market power, is unsettling because this process has yielded a monolithic presentation of economics from a specific, that is neoclassical, perspective. However, although many neoclassical economists emphasize scientism, there is an obvious connection between theory and policy, which inherently makes economics political. Presenting the average level of unemployment as the "natural" rate breeds more conservative and market-oriented wage policies, whereas rendering it using the notion of "reserve army of labor" would lead to different policy alternatives. In economics, the choice between competing theories, most frequently than not, becomes a corollary to political agendas. Because ideological statements are frequently hidden behind scientific-looking esoteric models, it is difficult to differentiate whether a certain policy implication was based from a purely objective theoretical construct, or from an ideologically biased model. Kuhn (2012) has argued that it is, naturally, the college textbooks that reflect the dominant paradigm of the moment. In this regard, the material content of economics textbooks plays an important role in spreading knowledge. Students study college textbooks as if they are gospels of scientific truth. As a result, the concealed ideology penetrates to the public, media, and academia.

Paul Samuelson was well aware of how influential introductory economics textbooks could be, stating "I don't care who writes a nation's laws—or craft its

advanced treaties—if I can write its economics textbooks” (Weinstein, 2009). This is a confession, from a top professional, of the political nature and importance of economics teaching. He, indeed, wrote many nations’ economics textbooks since his textbook, *Economics: An Introductory Analysis* was first published in 1948 and has dominated the textbook market as a bestseller around the world, for quite a long time. I have the opinion that critical reading of economics textbooks is a useful way to reveal the ideological underpinnings of mainstream economics. Hence, the main motivation behind this research is to track and decode these ideological underpinnings of economics teaching at the introductory textbook level. The central hypothesis is that there is an ideological bias in the economics textbooks and that over time it has transformed, with variations.

As will be discussed in the literature review, there are few studies focusing specifically on the ideological discourse of economics textbooks. The article “The Textbook Presentation of Economic Discourse” by Arjo Klammer (1990), could be the work closest to my thesis. Considering Samuelson’s textbook as the obvious target, Klammer has given a rhetorical analysis of the twelve editions published from 1948 to 1985. Critically reading the textbooks’ introductory chapters only, Klammer has argued that Samuelson’s presentation of history of economic thought, disagreements among economists, and Marxian doctrines have been inaccurate, conflictive, and ideologically biased. Although Klammer’s paper is a decent starting point into the rhetorical inquiry of mainstream textbooks, it does not provide an in-depth investigation.

This dissertation contributes and improves Klammer’s work in at least three ways. First, it narrows Klammer’s range of topics down to the treatment of Marxist concepts. If

an author has a negative bias towards left-wing thoughts, then this will be more pronounced in the radical end of the political spectrum making it easier to make judgments regarding the political bias. Hence, narrowing the inquiry down to the reading of Samuelson's presentation of Marxist concepts would enable us to give a more elaborative critique of his discourse. Second; since Klammer's study, seven more editions have been published, a climacteric event took place, that is, the dissolution of the Soviet Union, which presumably would have an impact on textbooks. Thus, extending the study to the latest edition will yield a more up-to-date and comprehensive analysis. Third, basing the methodology strictly on the critical discourse analysis (CDA) literature improves the examination's competency and reliability.

In Chapter 1, the relevant literature will be reviewed. Mainly, the studies on the market structure of introductory economics textbooks and the economic rhetoric-ideology nexus will be covered. The purpose of the Chapter 2 is to explain my methodology and to try to justify why Samuelson's textbook is selected for this work. Chapter 3 will introduce the demarcation problem in philosophy of science. After revisiting the debate among Popper, Kuhn, Lakatos, and Feyerabend, methodological and ideological aspects of economics will be discussed. Chapter 4, which is the longest chapter, will present an analysis on Samuelson's textbook. Edition by edition, the critical reading of the Samuelson textbook's relevant sections will be demonstrated. Chapter 5 will summarize and discuss the findings.

CHAPTER 1

LITERATURE REVIEW

In 2012–2013 academic year, 26,832 students were conferred a bachelor's degree in economics in the United States (Snyder & Sally, 2013). This figure goes up to 35,801 when we add other majors directly related to economics such as applied economics, managerial economics, and agricultural economics. All business school students, including business, finance, and accounting majors, take more than a few required economics courses. It is also very common that other social sciences and quite a few of the engineering students take basic economics courses. Some of these students minor in economics, as well. As an anecdotal figure, Brown University has reported, "17% of this year's (2013) graduating seniors had some kind of economics concentration under their belts" (Roose, 2013). Maier (2003) estimates that, in the United States, about one million students take at least one introductory economics course and 750,000 textbooks are sold every year.¹

Although most economics departments offer a variety of courses from a variety of perspectives, many of these noneconomics majors' contact with economics is very much limited to introductory level macro- and microeconomics courses. Courses like political

¹ These are rough estimates, not official data.

economy and history of economic thought are rarely offered by economics departments that have a mainstream orientation. Even when they are offered, they are offered as unpopular electives. Also, considering the intermediate-level theory courses are built upon the introductory courses, there is not a variety of ideas and strands taught in mainstream economics departments other than the standard concepts covered in principles courses. Course like “managerial economics” or “industrial organization” are just narrower applications of microeconomics course. Students, by and large, can be regarded as a captive audience for these principles of economics textbooks and instructors. In those respects, textbooks at the introductory level play a more important role than textbooks at any other phase of undergraduate economics teaching. The knowledge imposed by these introductory textbooks is propagated in the media, and in all other professions, which then is spread even to people who have not gone to college (Zuidhof, 2014).

Pluralism of ideas would muddy the waters; hence, concentration of the presented ideas is essential for the effective propagation of ideology. In the first subsection, I will cover the literature showing that there is a high degree of concentration and standardization in the economics textbook market. This conclusion will support the choice of Samuelson’s textbook as the subject of this study. Second, I will review relevant works on rhetoric and ideology, for my reading of Samuelson involves both an ideological criticism and a rhetorical inquiry.

1.1 The Market and the Textbooks

By the early 1970s, as new authors and publishers entered the market more assertively with some innovations and improvements, Samuelson's textbook has started to lose some of its market share (Walstad & Watts, 1998). Eventually, McConnell's textbook has become the bestselling textbooks with a three-to-one lead over its closest competitors (Carvellas et al., 1995). Gregory Mankiw, who published his first introductory level textbook in 1997, has caught up with McConnell et al. (1990) later in 2000s (Maier, 2003). Nonetheless, it is crucial to state that all these newcomer textbooks were not any different than Samuelson's "gold standard" textbook.

Although there has been some competition in the textbook market, it has been an imperfect one. Stiglitz (1988) argues that in 1980s it was more like a monopolistic competition with too many similar products with slight differentiations in size, level, and organization. Sichel, on the other hand, had opposed this view arguing that there have been market leaders determining the price, and smaller authors and publishers following the leaders with imitations (Walstad & Watts, 1998). Since contents were more or less the same, the textbooks could have been considered as homogeneous. These features, Sichel suggested, makes the market a better approximation to an oligopolistic one with leaders and followers, instead of a monopolistic competition. Samuelson's long-running leadership could also be considered to be a result of his first-mover advantage started in 1948.

As in most other private businesses, there is not much publicly available detailed information in the textbook market. Market size, sales, and market shares are all proprietary information. Naples and Aslanbeigui (1996) state that the best-selling four

texts (Baumol & Blinder, 1979; Byrns & Stone, 1992; Lipsey et al., 1991, McConnell & Brue, 1990) made up to 40-45% of the total market share in early 1990s. They state in their article, that this information comes from their personal conversations with publishers and authors. Lopus and Paringer (2012) give a more recent figure and report that out of 26 principles textbooks, two of them, McConnell et al. (2011) and Mankiw (2014) represent more than 40% of the sales. Although the sales figures are, for the most part, confidential information and it is difficult to come up with exact tables and numbers with clear conclusions, just by looking at the above figures, we can conclude that there is a very high market concentration and a conceivably increased Herfindahl index value today, compared to the 1990s.

The research literature on principles of economics textbooks is scarce. Lopus and Paringer (2012) make a general analysis of the textbook market briefly covering all 26 textbooks published in 2009 and later. They find that all 26 textbooks are close in length and their organizational formats are very similar, with only marginal differences. Except for a few, all the textbooks are positioning themselves at middle-level of difficulty to widen their customer spectrum, similar to Hotelling's law. Most of them extend their pedagogical features to online and offline supplementary materials. Lopus and Paringer claim "the mainstream principles today attempt to provide a balanced point of view and do not present the material from a strictly liberal or conservative perspective." However, they show only a few cherry-picked anecdotal examples. Among all textbooks only Colander's text could be considered as a pluralist text, whose market share would be negligible. Among mainstream textbooks, the ideological spectrums is very narrow. Almost all bestseller textbooks present the neoclassical synthesis, sometimes called the

“bastard Keynesianism,” a hybrid of neoclassical microeconomics and Hicksian IS/LM macroeconomics. Most textbooks do not cover Marxist or post-Keynesian economics at all. In these senses, Lopus and Paringer overplay the suggested pluralism of introductory textbooks with insufficient support for their argument.

Walstad and Watts (1998), while discussing the degree of competitiveness in the textbook market, offer a content analysis of leading introductory textbooks. Just like Lopus and Paringer (2012), they discovered that content coverage and other pedagogical features were fairly standard among eight leading textbooks in late 1980s, leading them to conclude that there is a “consensus” textbook. Heilbroner and Galbraith’s (1987), and Baumol and Blinder’s (1979) textbooks stood alone with some lengthy and sympathetic discussion of Marxian economics, while others present little or no coverage at all. They come up with an important conclusion that “textbook adoption decision is somewhat illusory, given the high degree of standardization in the textbooks.” They deduce that there were only marginal differences among the eight leading textbooks they had analyzed.

Carvellas et al. (1995), focusing more on how the size and length of the introductory textbooks have changed over time, also agreed with the aforementioned studies that there is a high degree of uniformity across leading textbooks. They have, very significantly, found that “areas where textbooks could be more diverse have shrunk in size.” Klammer (2013) calls these as “to-be-left-out-when-time-runs-out-topics” (p. 141). Carvellas et al. stated that the two underlying reasons driving this standardization were market forces and institutional considerations. Although marginal costs of textbook publishing are very low, initial sunk investment is high. This automatically deters entry

into the market. They also state that professors rarely switch textbooks and graduate students tend to use their professors' textbooks when they start teaching. This implies that there is a high-level of consumer loyalty, which is hard to break for new entrants. Most of the new and nonmainstream entrants trying to break into the market with different presentation, format, and ideological leanings, like Sherman and Hunt (1975), Alchian and Allen (1972), and Ruffin and Gregory (1986) could not survive in the market. A more assertive and radical attempt was made by Joan Robinson and John Eatwell by publishing their *An Introduction to Modern Economics* in 1973. Although it was a revolutionary book in terms of its pluralist content, organization, and presentation style, only two editions were published (King & Millmow, 2003). Famous economist Edmund Phelps published an introductory textbook in 1985. He wanted to differentiate his textbook by presenting some nonmainstream political economy perspectives, as well as covering conventional economics theories. Only a few universities had adopted these innovative and quality textbooks. And none of these are in print.

Another attempt came from Bowles et al. (2005) with their *Understanding Capitalism: Competition, Command, and Change*. This is a decent, but nonconventional, textbook from a Marxist political economy perspective. It covers a great deal of history and economic thought. Topics like environmental degradation, income and wealth inequality, poverty, class relationships, and limits to economic growth are not marginal to but at the center of the presentation. As the title attests, it is a study of actual capitalism, not of some hypothetical free markets with perfectly competitive firms. The first edition of this textbook was published in 1985. The third, which is also the latest, edition was published in 2005, and it is still in print from Oxford University Press. Although its

market share is, presumably, negligible, *Understanding Capitalism* still serves as a good alternative to economics professors and students.

In her research, Long (2014) studied modern textbooks in comparison to Marshall's *Principles of Economics*. She found that the modern textbooks are mathematically more technical than Marshall's. Marshall focused more on the concepts and left the mathematical details to the footnotes or appendices, whereas modern texts incorporate mathematics into the text. She also concluded that Marshall narrowed the scope of economics to business activities; however, modern textbooks, starting with Samuelson's, broaden the scope to include almost all human behavior that include a choice that is subject to a constraint. This may be due to, first, trying to make economics look more relevant to increase enrollment and textbooks sales; and second, related to the first one, more efficiently spread the ideology underneath.

The purpose of this subsection was to show that 1) there is a high degree of concentration in the textbook market; 2) the textbooks are very much similar to each other; 3) majority of the textbooks present the neoclassical paradigm only; and 4) Samuelson's textbook could be regarded as the consensus textbook. In the next subsection, I will review the featured studies regarding the rhetorical and ideological aspects.

1.2 Economic Rhetoric and Ideology Nexus

Beginning with S. W. Jevons, an economist in the nineteenth century, there has been an urge to characterize economics as a positive science. In Jevons's vision, economics was simply a calculus of pleasure and pain, disconnected from the political,

institutional, and social aspects (1871). Beyond the emphasis on positivism, Jevons (1871) had proposed a demarcation criterion saying “I contend that all economic writers must be mathematical so far as they are scientific at all” (p. 52). This position is still the dominant view in economics academia. Mathematical elegance in economic models is regarded as more important than the conceptual explanations and verbally expressed theories.

McCloskey, in her revolutionary book *The Rhetoric of Economics* (1998), brought a strident criticism on the widespread use of mathematical models. She claims that economics, as a system of metaphors, was scientific and literary at the same time. Literary arguments and style of persuasion play significant roles in deliberating the findings or explaining the theorems. According to McCloskey, cogency of the law of demand does not come from rigorous proofs. The scientific character of the regressions and statistical analysis are pretty much irrelevant. If the law of demand theoretically makes sense to the economists; then, even if they cannot find indisputable empirical evidence, using literal devices they still try to convince themselves and the audience. It is not the mathematical rigor that does the job but the art of persuasion. In this regard, McCloskey argued that, the charm of scientific method is exaggerated. Rather, economists should advance the quality of their narratives for a more disciplined conversation.

Following McCloskey’s rhetorical approach, Klammer (1987) analyzes the rationality metaphor in microeconomic theory. Similarly, Mirowski (1992) shows that neoclassical economics was built upon the constitutive metaphors of 19th-century physics. Bicchieri (1988), agreeing with McCloskey, discusses that metaphors are not merely

ornamental. The common conclusion of these authors is that metaphors, as a rhetorical device, have some persuasive power above the scientific theories and findings. Klammer et al. (1988) gives a more far-reaching treatise on rhetoric of economics. Maki (1988), on the other hand, claims that “rhetoric and realism do not exclude each other” and that together they could make up a coherent methodology of economics (p. 89).

After reading many of McCloskey’s early works on rhetoric, what struck me most was her disinterest in ideology. She does not totally ignore the ideological nature of economics; however, she definitely underplays its importance. The word “ideology” is mentioned only three times in her famous book *The Rhetoric of Economics*, and one of them is out of context; and, “ideological” is mentioned only once. In contrast, almost the entire literature of critical discourse analysis focuses primarily on the ideological aspects of certain dominant discourses. I should remark that Deirdre N. McCloskey (born Donald McCloskey) earned her undergraduate and graduate degrees in economics at Harvard University. Her dissertation supervisor was Alexander Gerschenkron, who was an Austrian School economist. Later, McCloskey taught and gained her tenure at the University of Chicago. Her neoclassical orientation possibly explains her hesitance towards an ideological critique of economics. She admits that neoclassical theory’s predictions are not satisfactory, and that its assumptions are not realistic; yet, it is persuasive and should be accepted (1998). Her arguments are not for the rejection of neoclassical theory but for a refinement of its narrative.

It is not that different in the rest of the rhetoric of economics circle. Maki (1995), diagnosing McCloskey’s rhetoric, avoids touching on ideology; rather, he prefers a euphemistic expression such as “rhetorical justification of beliefs.” In his article, he never

uses the word “ideology” but the word “belief” is mentioned 38 times. Ariel Rubinstein, using a formal approach, has also made an attempt to show the relevance of language in economics (Rubinstein, 2000). Goldschmidt and Szmrecsanyi (2007), using corpus method, conducts a data-driven linguistic analysis of top economics journals and demonstrate that the language is highly technical and mathematical. In their studies, neither Rubinstein nor Goldschmidt and Szmrecsanyi make any discussion of the ideological underpinnings of economics discourse.

Heilbroner (1996), on the other hand, clearly states that since we are social creatures with feelings “economics can never be without ideological content” and that this is not a weakness but a necessity (p. 47). He states that the word “capitalism” very rarely appears in *American Economic Review*, whereas the words “model” and “system” flourish. This aversion, according to Heilbroner, is an indicator of ideology. Heilbroner (1988, 2013) also asserts that the ideological content arises from the “absence of historical perspective” and “its denial of any trace of political power” (p. 109). In these respects, Heilbroner considers economics as ideology, rather than as a rhetoric. Gunnar Myrdal (1978), a Nobel Prize laureate in economics, rejects the positivist *idée fixe* saying “valuations are always with us” in economics (p. 778). However, there is a general reluctance, in mainstream economics, to explicitly refer to ideology. When they make noises about ideology, they do it to show how neoclassical economics is detached from it, because it is mathematical and positive.

The main motivation behind these ideological representations of aspects of the world, which contribute to establishing and maintaining relations of power, are domination and exploitation. They may be enacted in ways of interaction (and therefore

in genres) and inculcated in ways of being identities (and therefore styles). Analysis of text is an important aspect of ideological analysis and critique.

Ideology, as a false-consciousness, reproduces social domination and power relations in a society and the main objective of critical discourse studies is to “make power relations explicit that are frequently obfuscated and hidden” (Wodak & Meyer, 2016, p. 19). Even though it is not the primary driver of social change, ideology, interacting with the material forces, affects and shapes our reality. People and policy makers reproduce the society being exposed to explicitly ideological discourses. This is why discursive dimensions of ideologies require special attention (van Dijk, 2000).

It is generally agreed by the historians that the main purpose of universal primary education is to control and manage the society by imposing a certain ideology (Clarke & Mearman, 2003). Hobsbawm discusses that the actual motivation behind universal education was not economic but political (2011). Bowles and Gintis (1976) provide a clearly more radical perspective stating that the role of education is to reproduce the status quo of society, with the current class structure and inherent inequalities. Howard Zinn, in his seminal work (2005), explains the U.S. education system as:

The rich, giving part of their enormous earnings in this way, became known as philanthropists. These educational institutions did not encourage dissent; they trained the middlemen in the American system—the teachers, doctors, lawyers, administrators, engineers, technicians, politicians—those who would be paid to keep the system going, to be loyal buffers against trouble. (p. 263)

Söderbaum (2009) argues that scientism enables economist to speak like experts; however, this expert position is dangerous if one acknowledges economics as ideology. Because textbooks are not read as ideological propaganda but as scientific gospels. If the standardized textbooks necessarily highlight one perspective and underplay or even ignore others, then it could be argued that economics teaching is propaganda of a certain

ideology. Galbraith supports this view:

It is the nature of privileged position that it develops its own political justification and often the economic and social doctrine that serves it best. No one likes to believe that his or her personal well-being is in conflict with the greater public need. To invent a plausible or, if necessary, a moderately implausible ideology in defense of self-interest is thus a natural course. (1997, p. 5)

Bailey discusses that education is an instrumental enterprise and implies that mainstream economics is all about indoctrination (1992). Chomsky (1975) also advocates that education empowers individuals to resist indoctrination. Cameron et al. (2003) in their article titled “Management Textbooks as Propaganda” interviewed four authors of leading management textbooks and asked if they intentionally wrote to advance the interests of certain groups and social classes, or if they objectively present the scientific theories and empirical works, as they are. Although there are slight differences among the four authors’ overall responses, all authors literally admit that their textbooks support managerial ideology only. Stephen Robbins, author and coauthor of bestselling management and organizational behavior textbooks, says that his textbooks “genuflect to the Gods of productivity, efficiency, goals etc.” R. Duane Ireland’s objective is to improve managerial practice. It is, indeed, quite fascinating to see how sincere business academics can be, even more than that of economics.

Tracking the ideological underpinnings in social sciences is not a trivial task because the bias is usually not directly observable. Ideologies are complex and not easily reducible to simple mathematical equations (Söderbaum, 2009). Ideology does not take the form of deliberate misrepresentation of the truth (Heilbroner, 2013; Schumpeter, 1994), which would have been easier to detect if that was the case. Rather, ideology highlights some aspects of social reality while underplaying others. This opaque nature

of ideology is what makes the rhetoric stronger and more relevant, indeed. Wodak and Meyer (2009) exemplify this saying, “a missing by-phrase in English passive constructions might be seen as an ideological means for concealing or “mystifying” reference to an agent” (p. 7). Anyon, overlapping with Heilbroner’s view, also notes that ideological bias in written texts “can take the form of omitting a fact or of subtle distinctions and emphases” (1978, p. 363). In that sense, even language itself can be ideological, since all aspects of social domination are manifested in language (Habermas, 1978). Eventually, a certain ideology might become so dominant and unchallenged that it would appear purely neutral to public.

Social science researches generate, for the most part, highly controversial results. This is particularly true for economics. Survey results of Alston et al. (1992) show that there are wide disagreements even among economists in top-ranked universities, on the main propositions of economics, such as “minimum wage increases unemployment.” However, Gregory Mankiw, in his blog, affirms that “many students in introductory economics courses become more conservative—or, to be more precise, more classically liberal—than they began” (2006). It is quite difficult to distinguish whether the textbooks sincerely reflect on the neutral scientific knowledge and empirical facts, which unintentionally turn out to be yielding conservative policies; or if textbooks are merely apparatus of indoctrination pursuing hidden ideological agendas, or both.

Romanish (1983) shows that high school economics textbooks dominantly present free market and free enterprise notions while excluding other theories. He summarizes this bias with a comparative example; citizens of capitalist Western countries consider socialist countries as wasteful and inefficient with all the planning and government

bureaucracy, whereas socialists view free market economies as inefficient and wasting resources on race-to-the-bottom advertising, product differentiation, bankruptcies, and recessions. Popkewitz (1977) also argued that objective and positive knowledge conveyed via standard social science textbooks usually has an ideological angle. Webster (1978, p. 85) examining five economics textbooks, suggested, “simplification of economic theory in elementary textbooks may encourage ideological distortions.” Cherry (1985) demonstrated that the minimum-wage legislation under Reagan was presented with a racial bias in the textbooks he studied. The main conclusion was that individuals have low income because they have low productivity, which can be taken as ideological. Feiner (1993) argues that there is a bias in the textbook presentation of issues related to women and minorities.

Most of the above studies focus more on the textbook-ideology nexus, with no or weak reference to the rhetorical aspects of economics. Klammer’s article “The Textbook Presentation of Economic Discourse” (1990) makes the three-way connection of rhetoric-ideology-textbook. Klammer gave a critical, but a quick, reading of Samuelson’s 12 editions, focusing mostly on the introduction chapters and table of contents. Highlighting Samuelson’s textbook as the usual suspect for a rhetorical analysis, Klammer (1990) contended that “Samuelson offers a *misleading characterization* of economics” (p. 160, emphasis in original). He argued that Samuelson asserts his scientific authority using a “this-is-what-you-need-to-know-tone” in his textbook (Klammer, 1990). Klammer, just like McCloskey, accused Samuelson of imposing his authority without legitimate support, methodology, and evidence. The textbook knowledge of Samuelson is almost like a *deus ex machina*. Students do not learn how economists do economics, they just learn the

conclusions and stories legitimizing them. Klammer said that “the ideological components are not made explicit; they have to be teased out in dialogue.” This diagnosis calls for a more detailed discourse analysis.

Another study on Samuelson’s textbook is Marc Linder’s two-volume book *Anti-Samuelson* (1977). Linder, unlike Klammer’s longitudinal approach, took one single edition (the 9th) and gives a chapter-by-chapter reading of the textbook. He argued that what Samuelson presents is simply bourgeois economics. Although Linder’s attack was a serious one, Samuelson remained silent on this issue. Klammer concluded that Samuelson’s silence, to a degree, justifies the accusations against his textbook (1990). This dissertation, for the most part, takes the issue from where Klammer and Linder have left off. I will present a case for ideological bias, referring to McCloskey’s work and to the critical discourse methods.

CHAPTER 2

METHODOLOGY

Mainstream economists generally tend to emphasize the scientific intensity of their works and draw a line between normative and positive economics. However, this does not necessarily mean that the writings are not ideological. The line they draw between ideology and science is often shallow, insubstantial, and illusory. Since the notion of ideology is inherently an abstract one and also the ideological leanings are not explicit in the texts, it is not an easy task to find an objective measure of ideology. Söderbaum (2009) says “ideologies are seldom reducible to simple mathematical equations” (p. 119). So far, there has not been any such measure determined in the literature. That is why most of the studies focus more on the rhetorical and discursive content of such writings to reveal the ideology underneath.

Samuelson’s textbook has been the most influential textbook of his time, which makes it the natural subject of this study. Varoufakis (2002) supports this claim saying that it is the most famous text and that “all the textbooks have since attempted to emulate Samuelson” (p. 378). Gottesman et al. (2005) also regard Samuelson’s textbook legendary (2005). Samuelson, in the 19th edition, also considered that his textbook had been the gold standard of economics teaching, implying that most of the textbooks have been imitating his “standard” textbook. Lopus and Paringer (2012) designated

Samuelson's textbook as "the consensus textbook," in that regard.

So far, *Economics: An Introductory Analysis* has been published in 19 editions (Table 2.1). Sales data are taken and calculated from Elzinga's article (1992). By 1980, the total sales added up to 3 million. Skousen (1997) estimated sales in excess of 4 million by 1997. A common used book multiplier of 2.5 would put the total sales over 10 million. On average, a new edition has come out in every 3.2 years and the mode year between each edition is three. In the 10th edition, Peter Temin updated the statistical figures but he was not a coauthor. As it started to lose its market dominance with the 12th edition, William D. Nordhaus started to coauthor, bringing many changes both to the organizational design and to the ideological bias of the text. The latest edition, the 19th edition published in 2010, is still coauthored by Nordhaus. However, for the last couple of editions, the textbook is more like a franchise, with Samuelson himself contributing little to the writing. [See Table 2.1]

First of all, analyzing a thick textbook page-by-page (ranging from 650 to 950 pages) for 19 editions is a tedious task. Even a simple descriptive content analysis would be very time consuming, and it would not bring useful results at all. Second, one can expand the study of ideological bias to an analysis of everything, covering all schools of economics outside the mainstream. Doing this for 19 editions would also be a very lengthy research. Alternately, one can study the treatment of a certain policy stance, such as government regulation, minimum-wage laws, or labor unions; however, the ideological bias would be less transparent in case of middle-of-the-road positions, it would be harder to reveal, and the results would be weak and inconclusive. In this research, instead, I specifically focus on the treatment of Karl Marx, Marxism, and

related topics. Marxism can be considered as the most radical strand of economic thought. For a liberal/conservative/mainstream economist, it would be an oxymoron to underplay centrist approaches but eulogize radical Marxist thoughts. This follows from the assumption of single-peaked preferences over political positions. So, my presupposition is that if the author has an overall negative bias towards left-of-the-road ideologies in economics, then his bias would be detectable in his treatment of Marxism and related topics.

Critical discourse studies do not, yet, have a well-defined empirical framework as Wodak and Meyer (2016) state. For the most part, data collection and analysis methods are problem-oriented. To operationalize my question, 19 editions of Samuelson's introductory textbook will be examined to see how the treatment of Marxism was and has changed over time. Instead of using a sampling method, every single section that includes Karl Marx, Marxism, Marxian(s), and Marxist(s) has been comprehensively scrutinized, along with selected sections mentioning socialism, communism, the Soviet Union, China, Engels, Lenin, Stalin, and so forth.

Both a simple quantitative content analysis and qualitative critical readings of the texts will be given. For the quantitative data, I reviewed each and every edition of Samuelson's textbook to see how many times Marx and related topics have been mentioned. I started with the index section, and reviewed each page where selected keywords were referenced. However, as I was reading, I noticed that the index sections were missing some references. Next, I skimmed the entire editions searching for keywords, allocating less time to unlikely chapters, such as "Economics of Uncertainty." Every time I read through the book I caught a couple of missing mentions until the

mention count difference between two reads were reduced to zero. For the qualitative analysis, numerous excerpts from the textbook have been directly presented to make the normative interpretations transparent and more perceptible for the reader. A thorough discussion of the implicit ideology has been given. The collected quantitative data are also fully reproducible by checking the editions of the textbook.

Table 2.1. Samuelson's sales

Edition	Year	Author(s)	Sales
1st	1948	Samuelson	121,453
2nd	1951	Samuelson	137,236
3rd	1955	Samuelson	191,706
4th	1958	Samuelson	273,036
5th	1961	Samuelson	331,163
6th	1964	Samuelson	441,941
7th	1967	Samuelson	389,673
8th	1970	Samuelson	328,123
9th	1973	Samuelson	303,795
10th	1976	Samuelson (and Temin)	317,188
11th	1980	Samuelson	196,185
12th	1985	Samuelson and Nordhaus	N/A
13th	1989	Samuelson and Nordhaus	N/A
14th	1992	Samuelson and Nordhaus	N/A
15th	1995	Samuelson and Nordhaus	N/A
16th	1998	Samuelson and Nordhaus	N/A
17th	2001	Samuelson and Nordhaus	N/A
18th	2005	Samuelson and Nordhaus	N/A
19th	2010	Samuelson and Nordhaus	N/A

CHAPTER 3

THE DEMARCATION PROBLEM, ECONOMICS, AND IDEOLOGY

The philosophy of science is a deep, fascinating, and controversial topic. One source of controversy is that it is quite difficult to define the domain of the philosophy of science. What is science about? What is a scientific theory? What is scientific method? Is there objective knowledge? Since the Greeks these questions have been discussed; however, there has not been strong conformity on the answers. Still, there is some broad agreement regarding the nature of science. Bird (2006) suggests that “the basic aim of science is to provide an accurate representation of the world” (p. 14). Somewhat similarly, Karl Popper (2005) thinks that the aim of science is to find satisfactory answers. These representations and answers should lead to natural laws in hard sciences, and tendencies in social sciences. According to logical empiricism, which is considered to be the official epistemology of science, the hypotheses derived from the scientific explanations must be testable against the empirical data (Rosenberg, 2011). The results obtained are not necessarily final; in time, they could be falsified, and superseded.

Of course, science does not give us the only and ultimate truth about everything. First, potentially, there could be limits to scientific knowledge and discoveries. For example, we might not be able to scientifically know what has happened before the Big

Bang. Or, we might not be able travel to the Andromeda galaxy. Secondly, art and literature provide a different sort of knowledge, not necessarily refutable or testable; however, they both play important roles for the advancement of societies. The contributions of science and arts are qualitatively different from each other. Modernists conceive that science helps humanity to control nature and develop the necessary technology to survive and improve living standards of the current and future generations. Hence, from a materialist perspective, scientific knowledge supports the infrastructure of societies; whereas arts and literature satisfy emotional and intellectual needs of human beings.

There are obvious differences between doing physics and doing poetry. In this regard, it is important to distinguish between scientific and nonscientific methodology and knowledge. This was the basis of the, so-called, demarcation problem; that is, finding the criteria to mark off science from pseudoscience and nonscience. There is a thin line between astrology and astronomy but astronomy has always been regarded as superior because it is a “science.” Arguments supported by scientific theories and data are more satisfactory than the ones based on personal experiences or opinions. Erich von Daniken’s *Chariots of the Gods* has become a worldwide bestseller, partially because it has been, misleadingly, presented as a scientific work in order to appear more credible. How can we tell the difference, though? Are there objective principles, rules, and values independent of time and space? How can we be sure that rules do not reflect a certain value or an ideology? Is there a meta-methodology that we can apply to all sciences? Or, do different sciences apply different methodologies? How do scientists choose when there are contending methodologies? How can we rationally account for progress in

science? All these questions have been extensively discussed during the second half of 20th century. Popper, Lakatos, Kuhn, and Feyerabend have been the featured thinkers greatly contributing to these discussions, among others, such as Laudan, Carnap, and Quine. Despite the fact that this philosophical debate has been somewhat inconclusive, it has produced quite useful arguments to consider.

For centuries, inductive empirical method has been considered as the obvious solution to the problem of distinguishing science and pseudoscience. Conversely, though, Karl Popper has supported deductivism against inductivism. He has rejected the position that positivist confirmation is the source of truth in science. Rather, he has put forward “falsification” at the center of scientific progress. Thomas Kuhn, on the other side of the debate, has argued that, in reality, science does not progress by falsification. He has said that there are scientific paradigms governing the way science is done. Paradigms are conservative, and protective against attempts of falsification. Science progresses, if it ever does, via scientific revolutions, as paradigms shift from a weaker one to a more comprehensive one. Imre Lakatos, a student of Popper, has tried to reconcile Popperian and Kuhnian philosophies. He has rejected Popper’s falsificationism for being too restrictive. Also, he has not agreed with the existence of unique paradigms and scientific revolutions. His consideration was that there are several research programs simultaneously trying to progress, competing with each other. Paul Feyerabend, on the other hand, has approached the issue from a very different perspective. He has argued that science is a very creative enterprise; and that imposing methodological constraints would only stifle its progress. His answer was “epistemological anarchism.”

In this chapter, first, I will present brief overview of the demarcation problem

from the abovementioned four thinkers. This overview will pave the way for the discussion of ideological underpinnings of economics as a social science. Second, I will discuss the relevance and application of the demarcation debate for economics and methodology of economics. Applying theories of scientific methodology to economics is a difficult task since these philosophical debates about methodology focus, mostly if not entirely, on natural sciences. In the end, classical physics are considered as the “prototype science to which all other sciences must sooner or later conform” (Blaug, 1992, p.3). However, social sciences are inherently political. The political nature of social sciences make them more permeable to ideology, which is missing from these philosophical debates, for the most part. In the last subsection, the ideological underpinnings of economics will be examined.

3.1 Karl Popper’s Falsificationism

Flowers with a certain color and appearance, roses for example, have familiar and similar smells. Due to this association, when we see another rose of the same color and appearance we, almost by habit, tend to expect the same smell. Observing cloudy and gloomy weather followed by rain makes us expect rain the next time we see dark clouds in the sky. Or, as a classic example, after coming across numerous white swans, one crudely tends to think that all swans are white. Obviously, correlation, that is, the observation of two events occurring together, is necessary but it is neither a sufficient condition for causal explanations nor does it imply that they will persistently occur together.

In his seminal book, *The Logic of Scientific Discovery* (2005), originally

published in 1934, Karl Popper suggested that empirical verification using induction method is both logically and practically impossible. Because, even after observing one million pieces of green emeralds, showing one blue emerald as a counterexample would suffice to refute the hypothesis that all emeralds are green. Hence, positive instances cannot not be used to prove a hypothesis true. Logically, inductive evidence will be incomplete and unjustified at all times.

There is no reason to think, according to Popper, that the sun will rise tomorrow just because it has risen by this time. He argued that science does not progress by such verifications. Past data would not necessarily reoccur in the future. So, instead of trying to verify theoretical models, scientists should genuinely design tests attempting to falsify them (Popper, 2009a). Confirming evidence creates false senses that the model is performing well and the results are always true. For instance, astrology aficionados often find evidence that confirms their false premises. It is not too difficult to observe many Capricorns who are patient, disciplined, and self-motivated, thus confirming their zodiac sign characteristics. However, these easy confirmations, according to falsificationists, do not serve as a validation because a single counterexample could refute the hypotheses. Therefore, we should genuinely search for those potential counterexamples and not seek verifying instances. Good scientific theories are the ones that are not easily verifiable but easily refutable. The narrower and more specific the model is, the easier it is to refute its conclusions with counterexamples; hence, the more scientific it is. Seemingly correct but irrefutable statements can be considered as too general, not proposing valuable knowledge—such as the statement “most of the birds fly.” Instead, scientific hypotheses must be restrictive, making the model too risky to survive in empirical tests—such as the

statement “chickens can fly.” From this perspective, the statement “chickens can fly” has more scientific value than “most birds can fly.” Popper sums all these up by clearly saying that “the criterion of the scientific status of a theory is its falsifiability, or refutability, or testability” (2009a, p. 48).

Popper’s logico-epistemic property of falsifiability has been a truly radical approach in the philosophy of science. Verification is a necessary condition. We cannot talk about scientific truth without verified theories. On the other hand, logical positivism could easily lead to degeneration of science. If induction becomes the official epistemology, then some scientists might search for confirming empirical evidences and overlook counterexamples. By decreasing the degree of testability, and hence falsifiability, one would tend to overprotect the model. At this point, Popper suggests another demarcation criterion; that is, scientists must avoid ad hoc hypotheses, which he later called “immunizing stratagems.” So, it is not sufficient to build simple and easily refutable hypotheses but also necessary not to defend them in case they are falsified. Scientists should not attempt to conserve their theoretical models and try to rescue them by saving hypothesis. Rather, they should allow their models to be falsified.

Popper’s epistemology is quite interesting and peculiar in the sense that it implies that there is no ultimate scientific truth. Take a hypothesis that is falsifiable. The truth of the hypothesis cannot ever be known by verification because there are potential falsifiers and scientists should continue to search for these counter observations. Once a falsifying observation is found then the hypothesis is refuted. Besides, when it is falsified, ad hoc auxiliary assumptions must not be used to save the hypothesis. This is to say; we cannot ever reach ultimate truth. Scientific progress comes not from the search for truth but

from continuous cycles of conjectures and refutations. Hence, a hypothesis could either be “false,” or “not false, yet.”

Furthermore, Popper, applying his aggressive demarcation criteria of falsifiability and avoiding immunizing stratagems, has boldly claimed that Marxian, Freudian, Darwinian, and Adlerian theories are not scientific. Referring to the Marxist theory of social change, he says “their predictions were testable, and in fact falsified. Yet instead of accepting the refutations the followers of Marx reinterpreted both the theory and the evidence in order to make them agree. In this way, they rescued the theory from refutation; but they did so at the price of adopting a device which made it irrefutable” (2009a, p.49).

While, according to Popper, Marxist theories were testable but falsified, Freudian and Adlerian psychoanalytic theories were neither testable, nor falsifiable. The supposed linkage between childhood traumas and adulthood behavior cannot be refuted. An unhappy family environment during childhood could, in one case, lead to hesitance towards marriage; in another case, it could lead to a positive reaction to make a marriage happier than that of her/his parents. In both of these cases, psychoanalysis finds a connection between early childhood traumas and adult personality. Then, there is no way to test and refute these psychoanalytical hypotheses. All of the clinical observations would be regarded as confirmations of Freudian or Adlerian theories, yielding no scientific progress.

Popper (2009b) had also criticized Darwinism on similar grounds, claiming that “Darwinism is not a testable scientific theory, but a *metaphysical research programme*” (p. 167, emphasis in original). To prove his theory of evolution, Darwin had searched for

fossils those fit into the timeline of evolution and tried to explain deviations using auxiliary assumptions. So, all these observations are, merely, confirmations of his theory. Further, survival of the fittest implies that species living today have been the ones fitted to their environment better than others. But fitness is defined as the capacity to survive, anyway. In this regard, Darwinian adaptation theory is almost tautological, which Popper considers it as another weakness.

The questioning of demarcation is an ambitious one and Popper's solution has been an inciting starting point. However, Popper's naïve epistemology is more like a normative position than it is a descriptive one. He dictates what science should be, but does not present what it is. Popper, like many other philosophers, had natural sciences in mind while constructing his epistemology. On the other hand, his attacks were mainly on social sciences, which are qualitatively different than natural sciences. He thought that there is a set of one-size-fits-all criteria to demarcate science from nonscience and pseudoscience for all science categories.

3.2 Thomas Kuhn's Historicism

Kuhn, on the other end of the demarcation debate, had focused more on the historical and sociological aspects of science. Instead of providing moralistic arguments and subjective criteria like Popper did, Kuhn, in his influential book *The Structure of Scientific Revolutions* (2012) originally published in 1962, tried to explain the progress in science and how science changes when it does. Whether scientists should follow a strict methodology and rules, like falsification, is another question but Kuhn figures that they just do not behave the way Popper has proposed. Scientists do not attempt to falsify or

necessarily confirm conjectures; rather, their objective is to explain events and figure out facts. Methodological rules of the game are, for the most part, loosely determined by the scientific community.

While Popper thinks that science should be continuously subjected to criticism and progress that way; Kuhn argues that there are long periods where it is conservative and resistant to changes. He calls these as “normal science” periods. Before normal science, there is no coherent and definitive set of theories to establish a paradigm, which is “the entire constellation of beliefs, values, techniques and so on shared by the members of a given community” (Kuhn, 2012, p.175). When the scattered theories get together in a compatible manner then science enters into a normal stage. The dominant paradigm’s explanatory and predictive power must be higher than its challenger. This is, for the most part, determined by agreement of the scientists. Ptolemy’s geocentric planetary hypotheses had been accepted as the dominant paradigm for quite a long while. The scientific community has been convinced for the time being that there has not been a cogent paradigm with a higher explanatory power. During normal science, there are no critical discussions regarding the fundamental axioms and the prevailing methodology of the established paradigm. Experiments and applications are carried out to verify certain theoretical conclusions of the paradigm, not to falsify them as Popper suggested. Most of the research focuses on refining the paradigm within its own limits. In this regard, normal science is the status quo.

Kuhn, also, calls normal science as puzzle-solving (2012). Usually, difficult puzzles are set aside until the easier ones are solved. The current bulk of scientific knowledge, then, makes up the textbooks. Academia does not expect groundbreaking

dissertations or revolutionary ideas from graduate students; rather, utilizing their textbook knowledge, students are expected to continue solving puzzles and contribute to the refinement process of the current paradigm. They attempt to unify different, and seemingly disconnected, models within the same paradigm. A certain set of vocabularies specific to that paradigm could emerge and may even spread to the public.

Eventually, normal science enters into a stagnant era. Observations that are irreconcilable with the paradigm start to emerge. Kuhn considers these observations as anomalies. These anomalies could be difficult puzzles that have remained unsolved for a long time, or newly discovered oddities. Paradigm, as it has matured to this stage, starts to lose its explanatory power. As research tends more towards these issues, new anomalies could arise. This weakens the paradigm even further. The fundamentals of the paradigm could be questioned. At this point, Popper suggests that these counter observations should lead to falsification of core hypotheses. However, according to Kuhn, the scientific community does not effortlessly give in and dispose of the paradigm. They strive to conserve it with slight modifications and ad hoc hypotheses. With sufficient effort and concessions these anomalies could be worked out into the paradigm. Nonetheless, some of the anomalies may persist quite a long time. Considering that the core of the paradigm is saturated, young researchers concentrate on these unsolved puzzles. The scientific community might, inevitably, begin to put more weight on the significance of these anomalies. When the number of anomalies increase beyond tolerable limits or they are few in number but bear high urgency, then the paradigm goes through a crisis with a possibility of a break down; in other words, a scientific revolution.

Scientists do not abandon a paradigm without a new paradigm in mind. For a

revolution to take place there must exist a rival paradigm challenging the current one.

The rival paradigm would pose a threat only if it shows potential to elucidate the unsolved anomalies, as well as has the capacity to enclose the current paradigm. During the crisis stage, paradigms must enter into debates. Younger academics usually work on the frontiers of the paradigm since the core theories have usually been completed. It is this younger generation who challenge the problematic paradigm whereas the older and committed members of the scientific community exert resistance against change. If the results cannot be incorporated into the current paradigm, then there is room for a paradigm shift. This change depends not only on the objective qualities of the new paradigm but also on the struggle between the conservative and revolutionary scientists. The actual shift could take a long time since it is not always easy to persuade the scientific community. For instance, the Copernican revolution took more than a hundred years. When the current paradigm is replaced by the new one, a scientific revolution has taken place. After the paradigm shift, another normal science era starts. Textbooks are updated or even rewritten, accordingly. In time, the prevailing paradigm stagnates and brings new anomalies out; and the same cycle goes on.

Kuhn's historical approach has been criticized for being irrational in the sense that scientific progress is reduced to the social psychology of the scientific community. After all, whether rational or not, there are instances confirming Kuhn's explanation.

Ptolemaic system had been the dominant paradigm and it had been perpetuated to coming generations. There were concerns and objections regarding some conclusions of Ptolemy's geocentric model; however, for quite a long time, there was no coherent rival paradigm to replace it. The challenging paradigms, such as the Pythagorean system, were

not convincing enough. Copernicus, however, not only falsified the Ptolemaic model but also provided a comprehensible heliocentric model. This resulted, according to Kuhn, in a scientific revolution.

The problem of “incommensurability” constitutes a bottleneck in Kuhnian philosophy. Most paradigms have their own specific methodologies and languages. In fact, many paradigms have overlapping sections. It is difficult for a post-Keynesian economist to communicate with a mainstream economist who specialized in matching theory. It is not always viable to make meaningful comparisons of competing paradigms. If this is the case, then how can we tell whether there is an overall improvement in science? This issue implies that, since we cannot rationally compare paradigms, science does not progress by accumulation. However, Kuhn argues that even though some theories are incommensurable, their empirical results can be compared. For instance, even though geocentric and heliocentric systems are not quite comparable, one can compare both systems’ predictions regarding the location of planets and their orbits. Hence, incommensurability does not pose a fundamental problem to Kuhnian philosophy of science.

3.3 Lakatos’s Methodology of Scientific Research Programs

Karl Popper has brought about an ahistorical approach to the philosophy of science whereas Thomas Kuhn has analyzed how the history of science actually unfolded. Hungarian philosopher Imre Lakatos, using the concept of “scientific research programmes” has taken a middle course between Popper’s extreme falsificationism and Kuhn’s sociological interpretation. His main research focused on the demarcation

problem and evolution of science. As a student of Karl Popper, Lakatos both criticized and attempted to liberalize Popperian philosophy.

Lakatos (1980), rejecting Popperian naïve falsificationism, asserts that a few unperceived puzzles do not, and should not, immediately induce scientists to dismiss a theory. Also, ad hoc hypotheses that rescue a theory are not necessarily regressive. Some theories could be progressing even with the existence of a few anomalies. In order to show this, Lakatos conceptualized his methodology of scientific research programs.

Popper had reduced his unit of analysis to smaller hypotheses whereas Kuhn's studies had concentrated on paradigms that consisted of certain assumptions, theories, and methods. On the other hand, Lakatosian research programs are similar to Kuhn's paradigms "but unlike a paradigm, a research program consists of statements, propositions, formulae, and does not include artifacts, experimental devices or distinctive measuring equipment associated philosophical theses and other nondescriptive items" (Rosenberg, 2011, p. 231). Lakatos asserts that there is a "hard core" at the center, which defines the characteristics of the research program. For instance, a Newtonian research program's hard core consists of three laws of motion and the law of gravitation. Unlike Popper's suggestions and similar to Kuhn's revelation, scientists stubbornly protect their theoretical hard core with a "protective belt" which consists of auxiliary hypotheses. When one notices deviations on the orbital movement of Uranus, Popperian naïve falsificationism would lead to the rejection of Newtonian physics. However, scientists have not abandoned the hard core as a result of this anomaly; rather, they have attempted to digest it with auxiliary hypotheses. Later, it was figured that another big mass was disturbing the orbit Uranus; which led to the discovery of Neptune. This is to say that ad-

hoc hypotheses are not necessarily damaging; indeed, paving a way for new discoveries, they could even be enlightening. According to Lakatos, this process is guided by “heuristics.” Positive heuristic determines how the community would deal with such anomalies. Whereas, a negative heuristic is the provision that the hard core would be protected against these anomalies, at least for a time.

In these cases, Lakatos argues that Marxism and Freudianism could be considered as research programs with a hard core and surrounding protective belt and that they should not be categorized as nonscience. What matters is whether a research program is progressive or degenerative. In progressive research programs “theory leads to the discovery of hitherto unknown novel facts” (Lakatos, 1980, p. 5). If a research program ceases to make novel predictions and continuously fabricates auxiliary hypotheses to intemperately protect the hard core, then it is said to be degenerative. When a program starts to degenerate, while another one progresses, then scientists, over time, might tend to join the progressive one. Eventually, the progressive one could become the dominant research program implying a scientific revolution.

Although Lakatos’ framework caters useful insights, his position regarding scientific methodology is unclear. Paul Feyerabend (1980) criticizes Lakatos saying that what he offers is “*words which sound like the elements of a methodology*” (p. 186, emphasis in original). As opposed to Kuhn, who assumed a single dominant paradigm, Lakatos’ approach inherently assumes the possibility of several research programs simultaneously competing with each other. This pluralism and competition warrants the rational progress in science. What happens, then, when a degenerative research program is preserved at all costs? Lakatos could not provide a plausible rubric or an explanation

for such irrational behaviors.

3.4 Feyerabend's Epistemological Anarchism

Following Kuhn's incommensurability arguments, Paul Feyerabend, in his influential book *Against Method* (1993) which was first published in 1975, argued that theories are not reducible to each other. Further, methodological rules are inherently domain-specific and too narrow to be applicable to all sciences. As a result, there are no objective criteria when it comes to the comparison of scientific knowledge. If this is the case, then the search for rationality in science is a futile attempt. This, in turn, implies that we cannot rationally demarcate science from nonscience, and neither should we. Hypotheses cannot be ranked in any meaningful way. Any method and any knowledge is just as good as another since there they are not objectively comparable.

Feyerabend resolves that facts do not play an irrevocable role in the decision to select scientific theories. Observations are theory-laden, which implies that every theory produces its own data categories and would establish a distinctive ontology. Eventually, theories would have different languages and different concepts, making communication among them unviable. Therefore, Feyerabend advocates that every theory must be evaluated according to its own canons, not with one-size-fits-all methodological rules.

Bruno Latour and Stephen Woolgar in their famous book *Laboratory Life* (1979) indirectly support Feyerabend's account showing how scientific facts are fabricated by laboratory experiments. Banuazizi and Mohavedi (1975) show that in the well-known Stanford Prison Experiment, Zimbardo had deliberately manipulated the guardians to behave in a more tyrannical way. Data are routinely fabricated by micro-processing the

observations. Rosenberg vigorously carries this forward by stating:

The results of laboratory experiments do not speak for themselves, but are created, put together by discussion, dispute and compromise; second, that the winners of this negotiation are not the group with the best evidence, arguments, methods or logic, but the group with the strongest social power. Indeed, on this view of the matter, concepts like “truth,” “evidence,” “fact,” “reality” are rhetorical tools employed to win debates. (2011, p. 174)

All these leads to methodological anarchism with Feyerabend’s infamous slogan “anything goes.” Scientific communities must be strict on the inspection of the reliability of research; however, there is no point in defining a rigorous scientific methodology. Methodological anarchism is not only inevitable but also creates a better environment for scientific progress. Feyerabend points out that Copernicus, Kepler, and Galileo have all contributed to science by violating the scientific conventions of the day. These “violations are not accidental events... On the contrary, we see that they are necessary for progress” (Feyerabend, 1993, p.14). Science is a highly creative enterprise; imposing restrictive rules and methods would only inhibit its potential. Scientific communities should let all rival methods survive, instead of discarding them. Ideas improve knowledge, and we should not prison them with walls and bars. “Against Method” does not imply that Feyerabend is against method per se; rather, he is against Popperian methodological monism and he supports flexibility and pluralism of methods. Even methods of witchcraft should be treated on par with, say, logical empiricism.

Feyerabend not only made critical assertions about scientific methodology but also about the role of science in society. High modernity puts a special emphasis on scientific knowledge. However, according to Feyerabend, science is not the only way to progress as it is deemed. There are other sources of knowledge such as philosophy, art, literature, and so forth. For the sake of humanity, these are not any less important than

science. Science should be for the people. However, it has been used to improve nuclear weapons, manipulate human behavior to sustain consumerism, and produce new surveillance techniques to protect the ongoing system. Scientism, as a sort of cultural imperialism, represses and indoctrinates the people. Children should be free to choose between magic, painting, and chemistry without any reservations.

3.5 The Demarcation Problem and Economics

Most of the methodological discussions in philosophy revolve around physical sciences. There could be three reasons for this. Firstly, following the monist view, sciences are universal; the subject matter of science could be different but the essential elements of good science are not. Whatever is true for hard sciences would apply to social sciences, at least as a close approximation. Thus, the demarcation criteria for, say, physics must be adopted by economics or sociology, as well. Second, it is easier to come up with rules and laws for physical sciences and not as much for social sciences. The relevance and importance of laws dominate the inexact conclusions derived in social sciences. So, more time and effort are put in philosophical debates regarding hard sciences because the debates are somewhat more productive. Third, physical sciences have a longer history of practice than social sciences. Hence, thinkers traditionally focus more on the hard sciences because social sciences are in their infancy. Nevertheless, the demarcation debate, as soon as it was commenced, has sparked the interest of academia in economics.

As Hausman figures (1989), applying Kuhn, Lakatos, and Feyerabend to economics has not been easy, though. Klammer says that “Kuhn’s notions of paradigm and

disciplinary matrix were too vague to make sense of economics” (2001, p. 72). Have there been scientific revolutions in economics? De Vroey (1975) claims that the transition from classical to neoclassical economics, during the late 19th century, was a Kuhnian revolution. Keynesian revolution in 1930s is considered to fit the characteristics of Kuhnian scientific revolutions (Coats, 1969; Stanfeld, 1974). Nevertheless, Baumberger (1977) strictly argues that all these are unsatisfactory applications of the concept of the Kuhnian revolutions and asserts that there are no Kuhnian revolution in economics. All in all, the attempts to apply Kuhn to economics has been inconclusive.

On the other hand, Bruce Caldwell argues that the notion of research programs “when interpreted broadly, would fit *any* discipline” (1991, p. 99, emphasis in original). However, when it comes to specifying the Lakatosian categories like hard core and protective belt for economics, the results have not been convincing (Klamer, 2001). Feyerabend’s epistemological anarchism has been the least popular one in economics. The critiques of mainstream economic methodology revolve around the quality, pragmatism, inconsistencies, and lack of standards, and “anything goes” has not been the suggested solution. Popperian falsificationism grabbed more attention in economics than the other demarcation criteria because it is clearer in its prescriptions, simpler to adopt as an epistemological position but difficult to apply. Still, with its higher and stricter standards, Popper’s approach has been the most attractive one for the mainstream economists.

Arguably, demarcation has been taken more seriously in economics than in any other social sciences. Because economists, especially the mainstream ones, have a tradition of emulating physical scientists. William Phillips, well-known with the Phillips

curve, has even “invented” a hydraulic macroeconomics machine named MONIAC (Monetary National Income Analog Computer). Phillips, using liquids as money, attempted to represent the British economy with MONIAC (Ryder, 2009). The mathematical content of economics has created a perception that it is indeed closer to hard sciences than, say, sociology, in which mathematics plays a minor role. The ambition to look more scientific was reflected in the language as well. Unconvincing and contestable propositions made impressions as “laws,” such as Say’s law and the law of demand. There has been more data available for economists. National statistics agencies have spent more money on collecting economic data on a regular basis. As a result, more empirical researches have been conducted than other social sciences. Further, economics has been given more coverage in the media than sociology. World-renowned prizes, such as the Bank of Sweden Prize in Economics which is marketed as Nobel prize, are given to successful academics. This makes economics look more respectable and somewhat more important than history, sociology, psychology, and anthropology.

Nevertheless, just like most other sciences, economics has not been a unified field within itself. There has always been contesting schools since Adam Smith. All schools are trying to explain the same phenomena but with different assumptions and models; hence, their conclusions turn out to be different. This creates a problem at the policy level. The decision to increase money supply to provide free healthcare or to bail out investment banks is inherently political. So, does it matter which school of thought is employed to make these policy conclusions? Yes, because economics is inherently ideology-laden. Broadly speaking, three major schools constitutes the field: Marxian economics, Keynesian economics, and neoclassical economics (Wolff & Resnick, 2012).

The ultimate policy conclusion of Marxian economics encourages changing the capitalist mode of production, whereas neoclassical economics suggests that free markets are the best way to allocate resources. Keynesian economics, as the middle-of-the-road school suggests applying some structural reforms and increasing extended involvement of the government to control the fluctuations in investment and employment. Other strands can be either categorized as one of these major schools or as a combination of two.

How do we determine which school to follow? Or, do we even need to choose one school while disregarding others? These questions are very much relevant to the demarcation problem discussed earlier; with an important difference, though. Deciding which one of these schools to teach and follow has political underpinnings. De Vroey (1975), while arguing that the transition from classical to neoclassical economics was a Kuhnian revolution, points out that the shift was essentially political. He says that “the urgent task was to discard a theory [the Ricardian theory] which was justifying a radical transformation of society. We face here a clear example of contradiction between a theoretical framework leading to radical conclusions and the power structure within a society, in which the bourgeoisie had become the dominant class” (1975, p. 435).

Economic science explains and, to a certain degree, shapes how the output is produced and how it is distributed. In this regard, there are vested interests that depend on the way economic policy is administered. For instance, a capitalist would prefer less public expenditure, which would be easily backed by neoclassical economics; whereas, government officials and some sections of the people would prefer bigger government institutions and more public spending, which would be backed by Keynesianism.

Customarily, neoclassical economics demarcates itself from Marxian, post-

Keynesian, institutional, feminist economics, and so forth, by positioning itself closer to hard sciences. They do not admit any organic attachments to the bourgeoisie. Rather, neoclassical economics claim that the mathematical rigor and methodological superiority of neoclassical economics make it “the” economics. Verbal political economy is considered to produce vague outcomes. On the other side, mathematics is precise, unambiguous, and it does not contain any ideology.

Another popular discourse used to demarcate neoclassical economics was to attack Marxian economics with the Popperian critique. As mentioned earlier, Popper has said that Marxist hypothesis are falsifiable, and they are falsified (2009a). So, Marxism must be abandoned because studying a falsified paradigm is unscientific. Let us consider the falling rate of profit hypothesis, which, in a nutshell, states that in capitalist economies, there is an inherent tendency for the rate of profit to fall due to investment competition among the firms. This, ultimately, leads to crises and depressions. First of all, despite the attempts to label this profit hypothesis as a law, this propounds a tendency. Even Paul Samuelson, in his summing up article of the capital controversies, has mentioned it as a law (1966). Marx, in *Capital*, clearly states that “there must be some counteracting influences at work, which cross and annul the effect of the general law, and which give it merely the characteristic of a tendency, for which reason we have referred to the fall of the general rate of profit as a tendency to fall” (1981, p.230). Okishio’s theorem (1961) proves that under the assumptions of perfect competition the new investment would only increase profits, not decrease them. However, as Bowles suggests (1981, p.186), “this result does not disprove the tendency of the rate of profit to fall.” Since the perfect competition assumptions do not apply to actual capitalism Marx

had analyzed, Okishio's conclusion is not a practically relevant one. Lastly, could the profit rates increasing over a period of time falsify Marx's hypothesis? It would be overly simplistic to expect a linear downward trend for the profit rate. Marx had pointed out numerous counteracting forces such as foreign trade, and increasing intensity of exploitation. These would falsify the hypothesis if it is a law, but not if it is a tendency. According to Popper, the tendency proposition would be too general to have scientific value and the argument of the counteracting forces would be considered as saving hypotheses.

In conclusion, economic science has been dominated by the neoclassical economics. Its academic legitimization comes, first, more from the supposed, methodological superiority than the rival paradigms. Secondly, Marxist and post-Keynesian economics, as its notable rivals, are blamed as ideological and nonscientific. To make sense of this, we need to clarify the methodological principles of the neoclassical economics.

3.5.1 On the Methodology of Mainstream Economics

Economics is a peculiar science in its disinterest in scientific methodology. Many economics programs, both at the undergraduate and the graduate level, do not even offer a methodology course. Many academics avoid discussing their methodologies, probably because they have not been trained in that field. In the literature, a well-defined methodology of economics has not been exhibited. Nevertheless, there is such a field. But the study of economic methodology and the mainstream economics have evolved independently of each other (Dow, 1997). Many academics create their research

emulating papers they have studied without a separate mention of a specific methodology. Still, there are some spoken and latent methodological principles.

The monist approach, which takes physics as the role model of good science, comes to the fore as the main position in economics (Mirowski, 1992). Therefore, although it is not possible to conduct experiments for most of the economic hypotheses, empirical testing appears to be one of the essential features of mainstream economics. Beyond this obvious tendency, when we look at the history, we see that early economic thinkers, from Smith to Ricardo, have all been verificationists. However, none of the early political economists have made their methodology explicit. They had very little quality data to empirically test their models. Cairnes points out that classical political economy was hypothetico-deductive; that is, its results “will correspond with facts only in the absence of disturbing causes, which is, in other words, to say that they represent not positive but hypothetic truths” (1965, p. 64). Over time, collecting quality micro- and macro-level data enabled economists to make better observations regarding the economy. It would not have been possible to figure out the short-run relationship between unemployment and inflation, that is, the Phillips curve in 19th century.

In modern times, the Austrian school economists, rejecting methodological holism, emphasized the significance of the individual. Society consists of individuals with common behavior. Hence, if we want to study the entire economy, we could focus on the individual decision-making processes. This principle of *methodological individualism* was later adopted by all the neoclassical economists. Their ultimate assumption is that the individual and other economic actors are perfectly rational; that is, individuals’ preference orderings satisfy completeness, transitivity, and nonsatiation

axioms. However, rationality, in economics, does not derive from observation; rather, it is an a priori assumption. Although macroeconomics and microeconomics have been studied separately, today, all the macro models require a well-defined micro-foundation. At the micro-level, a perfectly rational representative individual is assumed. Individual's preferences are illustrated by a well-behaved utility function. The individual wants to maximize her utility by nonsatiation; but she has a budget constraint limiting her consumption and utility level. Hence, we have a constraint optimization problem. Based upon the optimization problem of the individual, all sorts of macroeconomic models are built. Today, it is fair to say that methodological individualism is the most crucial element of the official methodology of mainstream economics.

Paul Samuelson's Ph.D. thesis, titled *Foundations of Economic Analysis* (1947), made significant contributions to economic theory. Not only did he mathematize the entire verbal propositions, but he also opened up the debate of dynamic stability and existence, which later turned out to be a tough research program in economics. According to Samuelson, academics should derive operationally meaningful theorems, which is somewhat ambiguous in terms of scientific practice (Klamer, 2001). However, by the term operationalism, Samuelson (1947) implies that economists should be able to derive theorems by testing hypothesis about empirical data, which must be refutable under ideal conditions. In this sense, as Blaug (1992) determines that Samuelson's operationalism is not distinguishable from Popperian falsificationism.

The assumptions under methodological individualism, perfect rationality, and profit maximization, among others, have been widely criticized for being unrealistic. Further, Richard Lester (1946, 1947) tested the very basic assumptions and results of the

neoclassical theory of the firm. By surveying numerous firms, Lester shows that businessmen do not profit maximize, nor do the firms follow the rules of marginal productivity. In his seminal article titled “Essay on the Methodology of Positive Economics” (1953), however, Friedman argues that the reality of assumptions is irrelevant and what matters is the predictive power of the theoretical models. Hence, theories are nothing but instruments to make predictions. As long as the model accurately fits the data, it does not matter if the economic actors are not rational or if the markets are not perfectly competitive. The first issue with this sort of predictionism is that the conclusions of empirical tests would be acceptable “only when *ceteris paribus* conditions are satisfied and only after observed variables have been adjusted for their true values” as Hollis and Nell elucidate (1975, p. 42); because all economic hypotheses are essentially *ceteris paribus* clauses but in empirical tests it is not very possible to control all the relevant variables that are considered to stay constant. The second issue is that Friedman’s philosophy, in a way, disclaims the principles of methodological individualism (Blaug, 1992). In methodological individualism, an individual’s rational behavior is of the essence for decision making. However, Friedman asserts that this is not important; even if economic actors are not motivated by rationality, the arrived result is “as if” they had behaved rationally. If firms are not profit maximizing then, in the long-run, dynamic competition would drive them out of the market. So, the existing successful firms must have been profit-maximizing. Still, just like Samuelson’s operationalism, there is some room for empirical testing in Friedman’s instrumentalism/predictionism. No matter how unrealistic the model is, it must pass some empirical tests to prove its predictive accuracy. However, there is some ambiguity

in Friedman's epistemology. Although Friedman identifies himself with Karl Popper's philosophy, his predictionism contradicts with Popper's falsificationism. Showing a model's predictive accuracy requires successive confirmations of the theory. In this regard, predictionism inherently implies verification of the theory. Hirsch and de Marchi (1991), after analyzing published papers of Friedman, find that Friedman's methodological claims and his actual practice are inconsistent with each other and that he was neither a positivist nor a Popperian. They prefer to label Friedman as a pragmatist, instead of instrumentalist or positivist.

Furthermore, despite the neoclassical economists' insistence in the importance of empirical testing and falsification as crucial demarcation criteria, Mark Blaug, a prominent Popperian economic methodologist, strongly argue that mainstream economists do not practice what they preach (1992). Similarly, McCloskey asserts that "Modern macroeconomics is erroneous. The econometrics is misspecified and therefore biased. The theorizing is misinformed and therefore irrelevant." (1988, p. 288).

Scientific methodology, positivism, empiricism, and falsificationism are all deified in economic circles, yet their research practice does not meet these high standards.

Actually, as Klammer argues, neoclassical economics lacks unambiguous methodological standards (2001). This certainly does not imply that "anything goes;" still, most of the methodological elements in mainstream economics are unclear and not well-defined.

Daniel Hausman states that Lester's results should have led to falsification of marginal productivity theory because the statements are shown to be false and other "implications of neoclassical theory have certainly been contradicted on many occasions" (1989, p. 20). He argues that "virtually all of the fundamental "laws" and theories of economics have

been falsified” (1989, p. 89). Many empirical papers published in top journals very frequently find unconvincing evidence or contradictory evidence for the models. In these cases, the models are never abandoned. Theory is protected; the blame is put on econometrics, data quality, time period, omitted variables, and so on. At any rate, like other social sciences, economics is an inexact science, there are always uncontrolled variables, disturbances cannot always be avoided, and data quality would always be an issue. However, there are not many neoclassical economists who admit the failure of neoclassical theory after repeated contradictory evidences; rather, they tend to protect the theory. This shows that mainstream economists preach Popperian falsificationism, but actually practice verificationism. Sheila C. Dow summarizes this by “Yet, while many economists paid lip-service to Popper in this regard, their practice conformed more to the earlier principle of verification, whereby theories could continue to be held as true as long as they were confirmed by the evidence” (1997, p. 76). However, when it comes to demarcation, they detach Marxism for being falsified, and Freudianism for being verificationist.

Dierdre McCloskey, with her seminal book *The Rhetoric of Economics* (1998), has joined this line of criticism arguing that the mainstream economists depart from the official modernist methodology, with a linguistic turn. According to McCloskey’s analysis, the main criterion for demarcation in economics has been persuasiveness, not the methodological rigor. She simply argues that economists need to acknowledge that economics is essentially rhetorical and that they should allow for democratic pluralism.

To sum up, there is a clear disconnection between neoclassical economics and economic methodology. The preached methodological standards are very high and strict,

which helps to demarcate mainstream economics from radical streams. However, the practice does not meet the Popperian standards they have adopted. De Vroey's contention that economic paradigms have political dimensions is disregarded in mainstream economics. In the next subsection, the ideological foundations implicit in the neoclassical economics will be discussed.

3.5.2 The Ideological Underpinnings of Mainstream Economics

Some neoclassical economists, emphasizing its positivist nature, insist that economics is free of ideology. For instance, Olivier Blanchard has argued that the reason most economies implement free market capitalism is because it often works, not because of a certain ideology (Backhouse, 2010). Some others are rather permissive. George Stigler, a Chicago economist, states that "the professional study of economics makes one politically more conservative" (1959, p. 522). However, Stigler, does not imply that economics is purely ideological per se; rather, he entails that economics is a positive science but its conclusions turn out to be conservative. On the other edge of the spectrum, economics is, without any hesitation, regarded as a political science with ideological underpinnings. Heilbroner strongly believes that economics is simply an ideology (2013). Myrdal admits that economists have valuations (1978). Varoufakis tries to reconcile the two extremes by saying that "economics is partly science partly ideology. Which part is greater is also a source of contention amongst economists!" (2002, p. 29). Similarly, Joan Robinson says "economics itself (that is the subject as it is taught in universities and evening classes and pronounced upon in leading articles) has always been partly a vehicle for the ruling ideology of each period as well as partly a

method of scientific investigation (1962, p. 8).

Even if, as Söderbaum (2009) suggests, we cannot quantify and objectively measure ideology, its manifestation in neoclassical economics is not so mysterious either. Heilbroner points out, as an indicator of ideology, the fact that the word “capitalism” rarely appears in *American Economic Review*. In jest, he calls this the “Curious Case of the Missing Word” (1996, p. 47). Feeling uneasy about a definitive term like capitalism raises suspicions. However, capitalism creates a class society, a very small class of capitalists receiving the lion’s share, and the majority of the population working for peanuts. As Emery Kay Hunt (2015) explains, analyzing the economy from the vantage point of production and capital relations, like Karl Marx, leads to class conflict view; reducing the examination to the sphere of exchange, like Bentham and Malthus, leads to social harmony view where all voluntary transactions mutually benefit both parties. Thus, shelving the word capitalism, which has negative connotations, in favor of free-market economy or mixed-economy has ideological motives. Even if this does not serve as a proof of ideological motivation, the end result yields political and ideological gains.

Another indication of ideology lies under the hood of methodological individualism. In standard microeconomic theory, we assume an infinitely-lived representative individual with complete, transitive, and nonsatiated preferences, maximizing her preferences subject to her income. This summarizes the entire microeconomics in mainstream economics. How is this ideological? “It is the unnoticed intrusion of the innocent word: income” answers Heilbroner (1996, p. 48). Income, in most of the microeconomic models, is fixed and exogenous. However, in capitalism, income must be earned. To earn income, individuals, who do not own the means of

production, must work. And, they must work for a capitalist, who own the means of production. One innocent-looking word actually conceals the class relations inherent to capitalism. The notion of a representative individual falsely suggests the existence of social harmony between Bill Gates and his worker.

Ideological underpinnings of the neoclassical firm theory are also worth discussing. Profit maximization of the competitive firm yields marginal revenue products of labor and capital equal to wage rate and interest rate, which are the remunerations of these factors. This, in theory, implies that the incomes of the workers and capitalists depend on their marginal products. Hence, the conclusion is that, in free market capitalism, everybody gets what they deserve and everybody deserves what they get. Income inequality is never an issue for neoclassical economics because any income distribution under free-market competition is Pareto-efficient and fair. If a cashier is making 9 dollars per hour in a restaurant and Bill Gates is earning 582,192 dollars per hour from his capital investment, then it must be the case that the cashier's contribution to the product is worth 9 dollars and Bill Gates's contribution is worth 582,192 dollars. They are just getting what they deserve. This logic legitimizes perverse income distributions in capitalism which, in return, works against redistribution policies through progressive taxation. Because progressive taxation would, unfairly, punish the hard-working capitalist and reward the lazy worker. This creates disincentive for growth, innovation, and progress.

Another manifestation of ideology, as Heilbroner argues, is neoclassical economics' "absence of historical perspective" (1988, p. 41). Textbooks and journal articles model the societies as if free-market capitalism is eternal, but it is not. Laws

governing the economy change very frequently, wars and politics reshape international trade and global political economy, revolutions take place, and so on. All these happen for a reason. There are different classes with conflicting interests, and there is a constant struggle between classes and countries. Disregarding the historical perspective creates the illusion that the mode of production will not ever change, supporting the status quo.

Figuring out the relationship between price and quantity demanded could be a value-free research topic which, seemingly, depends on data and statistics. One can collect sales data over time and analyze them, without making any subjective judgment. However, the explanation of the law of demand could be quite normative. A mainstream economist derives the downward sloping aggregate demand curve using a representative Cobb-Douglas utility function, assuming there is diminishing marginal utility to each commodity. Another economist, who might also consider herself a mainstream economist, could derive the same demand relationship assuming there are different income groups in a society, and when price level increases lower groups drop out of market, reducing the total quantity demanded. There could be multiple and equally valid interpretations of a given data, though from a variety of perspectives.

In macroeconomics, where political differences are more obvious, we still see mystification of categories. Nonaccelerating inflation rate of unemployment (NAIRU) is simply a way to play down the unpleasant connotations of unemployment. We cannot, and do not know the actual rates of structural and frictional unemployment. Then, how can we calculate the natural rate of unemployment? Either by moving-average or more technical filtering methods. They deduce that the average must be the natural rate. A persistent unemployment rate of 25%, if inflation rate is not accelerating, could be taken

as the natural rate. This perspective naturalizes and trivializes the problem of unemployment. “The very mention of the word ‘natural’ invokes images of inevitability and thus acceptability” (Varoufakis, 2002, p. 287). As long as people are unemployed voluntarily, there is no problem and we do not need any active government policy. But, on the other hand, the very phrase of “reserve army of the labor” takes the issue from a completely different perspective with completely different connotations and different policy recommendations. The phenomenon is the same on both cases: people without jobs. However, first, defining unemployment and, second, conceptualizing unemployment categories make a difference at the political level.

In all these respects, the selection of the words “natural rate” is not an arbitrary; hence, an analysis of “normative premises embedded in the language of economics” is necessary to reveal the ideological foundations (Avsar, 2011, p. 144). If the standard textbooks present, or even highlight, one school of economics while underplaying the other schools, then it could be argued that economics teaching is propaganda of a certain ideology. The main hypothesis of this research is that there is an ideological bias in the economics textbooks and that over time it has changed, with ups and downs. In order to test this claim, in the next chapter, we will critically examine retrospectively the consecutive editions of consensus introductory textbook, that is Samuelson’s. Certain break points in terms of the ideological bias have been discovered. Since the dissolution of the Soviet Union, we observe a constant apathy towards nonmainstream schools of thought.

CHAPTER 4

THE IDEOLOGICAL BIAS IN SAMUELSON'S TEXTBOOK

This chapter covers the critical discourse analysis of 19 editions of Samuelson's textbook. First, Figure 4.1 and Table 4.1 show how the word counts, representing the volume of the coverage, have changed over time. Starting with only 18 counts in the first edition, we observe an overall upward trend in the mentions of Marx and directly related subjects. Until the 8th edition (1970), there is a slightly increasing trend. With the 9th edition, we see a jump from 60 mentions to 236. The reason why we see such high peaks in the 9th, 10th, and 11th editions is that Samuelson has added a special appendix chapter to give a more detailed discussion of Marxism. Even if we exclude the mentions in the appendix chapters of the 9th, 10th, and 11th editions, we still see that the counts are above 150, which is quite a difference. In the 12th edition (1985), which is the first edition coauthored with William D. Nordhaus, they have eliminated this appendix completely. Also, other sections throughout the book have been deleted, reducing the mentions counts from 237 to 98. This is the first year of the reversal in the upward trend of the coverage. The downward trend has continued with the 14th edition, which marks the year after the dissolution of United Socialist Soviet Republic (USSR). There are sharp declines with 14th and 15th editions. In the last four editions, the coverage has not changed significantly.

Broadly speaking, there are four clustered time periods. The coverage in the first eight editions seems to be close to each other with only slight differences. Then there is an upward structural break in 9th edition, which continues in 10th and 11th editions. After five years, which is the longest gap between consequent editions, as Nordhaus starts to coauthor, a significant decrease takes place in 12th, 13th and 14th editions. Lastly, the five most recent editions contain a flat and uniform coverage both in terms of mention counts and ideological bias.

The quantitative data I added together in the previous paragraph only provide impartial mention counts. Although it does not show whether the treatment was neutral or biased, we can still inquire about the importance attached to Marxism. One would tend to reduce the coverage if she disregards the topic under question. Regardless, a more detailed and critical reading of these trends is of utmost importance.

4.1 Samuelson's Economics Between 1948 and 1970

In this subsection, I will discuss how Samuelson has approached Marxism in terms of the ideological tone for the first eight editions between 1948 and 1970. The 1st edition forms the core of later editions of the textbook. Most of the mentions in the 1st edition are carried to next editions as they are, or with slight changes. In this regard, a lengthier analysis will be executed for the 1st edition.

4.1.1 1st Edition, 1948

The 1st edition of Samuelson's textbook was more like a treatise and was quite different than modern textbooks today. There was not a clear distinction between macro-

and microeconomics. The arrangement of the chapters was also quite different; for instance, “Determination of Price by Supply and Demand” was towards the end of the book, which is usually covered as one of the earlier chapters today. Although it was the first textbook that mathematized economics, the overall coverage of history of ideas was surprisingly very expansive, as well.

His description of economics, in the introduction chapter, was a bit different and somewhat more progressive than that of modern textbooks today (p. 4): “It is the first task of modern economic science to describe, to analyze, to explain, to correlate these fluctuations of national income. Both boom and slump, price inflation and deflation, are our concern.” Contrast this to the standard scarcity and allocative efficiency definition in the last edition (2010) of the textbook (p. 4): “Economics is the study of how societies use scarce resources to produce valuable goods and services and distribute them among different individuals.”

Clearly, the 1948 definition is a macroeconomic one, whereas the 2010 definition is more like a restatement of general equilibrium theory in microeconomics. Beyond this, economic fluctuations were not yet explained by real business cycle theory. In real business cycles theory, the economy always tends towards the stable equilibrium path, and the fluctuations around this path are independently distributed, random, and caused by unexpected supply shocks to the economy. That is, recessions are not inherent to capitalism but mere surprises external to the system. However, following Keynesian lines, Samuelson actually does not tend to externalize economic fluctuations as if they are random shocks but states that they need some detailed analysis and explanation.

4.1.1.1 Individual and Family Income, Chapter 4 of Samuelson's Economics

The first-time Samuelson mentions Karl Marx and Friedrich Engels, is in Chapter 4, which is titled “Individual and Family Income.” Nine of the 18 total mentions in the 1st edition are in this chapter only. Throughout the chapter, he discusses unequal income distribution using some statistical figures and differentiating between family-level and individual-level data. Although he appreciates the importance of unequal income distribution as an economic problem, he thinks that growing national product is more essential. From “the paramount importance of high and growing national product becomes indisputably apparent” (p. 84) we can understand he considers increasing the size of the pie to be of primary importance, which helps the popular trickle-down theory. On that note, he criticizes Karl Marx in “The Decline of Poverty” subsection of the chapter:

It is now almost a century since Karl Marx and Friedrich Engels “in 1848” issued the notorious Communist Manifesto containing the lines: “Workers of the world, unite! You have nothing to lose but your chains.” A number of the Marx predictions as to the future of industrial capitalism were proved to be only too correct in the intervening years, but one of the most famous has proved to be quite wrong. Careful historical and statistical research shows that the belief that “the poor are becoming poorer” cannot be sustained. In Western Europe and in North America there has definitely been a steady improvement in minimum standards of living whether measured by food consumption, clothing, housing, or length of life. This is clear from statistics to be presented shortly. It is also obvious from a comparison with more backward nations, two-thirds of whose inhabitants are badly undernourished. (p. 67)

It is obvious from the above excerpt that Samuelson's very first touch on Marxism is not a favorable one. His main support for capitalism, and argument against Marxism, is that the economies are growing, there is more clothing, and people are living longer. This is overly simplistic because economies had been growing, living standards had been improving, and life expectancy had been

increasing even under slavery. Furthermore, Marx hypothesized that there would be a downward pressure on wages if the bourgeoisie was stronger than the proletariat, the subsistence wage being the minimum level.

Of course, over time economies grow, and this is not a surprise to Marx; however, as living standards improve, the description of subsistence level changes too. This is because the system creates new needs to expand itself, which eventually become parts of the normal consumption. Subsistence also differs from country to country; in Somalia, a microwave oven might not be a part of the subsistence bundle whereas in the United States even owning a car would be a necessity to go to work.

Improving living standards is not a contradiction within the Marxist theory at all. First, in Marxist theory of labor value, as technology improves, the cost of producing the same subsistence bundle will decrease, reducing the value of labor power embodied in the good. Second, as capital is accumulated additional consumption goods will be produced, as some earlier goods expire. Hence, in the Marxist framework, both workers' living standards and exploitation ratio could increase. Last, but not the least, Lenin argued that imperialist countries economically exploit other countries. The reaped super-profits are used to buy the working-class people off, which also would improve their standard of living.

While supporting capitalism, Samuelson does not even clarify a causal relationship between capitalism and improving living standards. Economies had been growing throughout the history even under slavery and feudalism. Slaves

in the 16th century enjoyed higher living standards than the slaves in 15th century; they also lived longer. All these improvements in living standards were not specific to capitalism as a mode of production. The main reasons people are living longer today are because there is better and widespread education, sanitation, clean water, and waste management. These are not necessarily successes of capitalism. Anecdotally, Cubans live longer than Americans. And generally, Wilkinson (1992) shows that people in egalitarian countries have longer life expectancy and argues that there is a causal relationship between a more equal income distribution and higher life expectancy. Notzon et al. (1998) also shows that the life expectancy in the former USSR collapsed after its transition to capitalism (1998). So, it might be argued that the profit motive in food and health-care sectors, in conjunction with stress in fast-paced lives, could actually reduce life quality and life expectation.

In all these respects, Samuelson's first critique of Marxism proves to be a very weak one, at best. He does not explicitly dismiss Marxism. Rather, he gives some partial credit to Marx, saying "Probably for half a century Marx was correct" (p. 69); but not anymore, is the implied continuation of the sentence. He does not analyze the points he admits Marx got right, but he spends pages on what he thinks Marx got wrong. Such a treatment would induce the reader to start thinking about Marxism as an old-fashioned and false paradigm.

In the same chapter, his last consideration of Marxism is under the subtitle *The So-Called "Class Struggle"* (quotation marks are original). In this subsection, Samuelson subtly looks down on Marxism, again. The scornful wording of the subtitle

speaks for itself. The opening of this subsection:

In his *economic or materialistic* determination of history theory, Karl Marx (1818–1883) placed great emphasis on the *class composition of society*. According to this doctrine the job makes the man, and a man's economic interests determine his political opinions. The well-paid college professor of economics writes textbooks that are apologies for capitalism; the newspaper editor, supported indirectly by advertisers' contributions, inevitably takes on a conservative slant. (p. 70)

In this passage, Samuelson makes a very narrow explanation of historical materialism, and then brushes it off with two supposedly sarcastic examples. Being a college professor himself, joking about professors implies that it cannot be true. He then continues:

Although he would have denied being a “vulgar political economist,” Marx spent a good deal of his life in the library of the British Museum burrowing away at the classical economic writings of Adam Smith (1723–1790) and David Ricardo (1772–1823). Like them he came to attach importance to the nature of man's income. The important thing according to Marx was not simply whether a man was rich or poor but whether his income came from land, capital or labor. (p. 70)

Samuelson, inconsequentially, continues to be allusive towards Marx, as if studying Smith and Ricardo implies being a vulgar economist. Indeed, any history of economic thought text, would categorize Smith, Ricardo, and Marx in the same school of thought. He persists his contemptuous rhetoric on Marx in the following paragraph:

In feudal times the landowners formed the dominant economic class. The industrial revolution caused the bourgeoisie (a 2-bit word for the businessman-capitalist) to become “the ruling class”. As capitalism became more and more monopolistic, as business crises and imperialistic wars became more and more intense, as the lower middle class were ground down into proletariat (working classes), as the owners of the tools of production increasingly exploited the laboring man, and as the “reserve army of the unemployed” grew, Marx believed the “internal contradictions of capitalism” would finally culminate in a “bloody revolution” which would bring the proletariat into power. (p. 71)

Although Marx never used it, Samuelson's use of “bloody” as an adjective to

“revolution” with elevated emphasis using quotation marks and his annotation of bourgeoisie as “a 2-bit word for businessman-capitalist” are merely judgmental, subjective, and personal choices for a scientist. Van Dijk calls this sort of ideological structure as “emphasis of negative other-description” (2016). Then, Samuelson proceeds to the aftermath of the “bloody revolution”:

He thought that for a short time a “dictatorship of the proletariat” might be necessary. But once a “classless” or “one-class” society became firmly established, the class struggle would end once and for all, and the state and dictatorship would “wither away”. Utopia would be established with “production for use and not for profit”, with each “contributing to society according to his ability” and “receiving according to his need”, and with “all values determined by labor alone”. (p. 71)

In a 77-word paragraph, Samuelson takes 33 words, almost half of the paragraph, into quotation marks to amplify his teasing, trying to give the impression to the students that these concepts, such as classless society, are all unrealistic or unscientific. He wraps up his take on Marx in this chapter with the following short paragraph, asserting that Marxism is an “oversimple” doctrine:

This is an oversimplified version of an oversimple doctrine. Marxists do not themselves agree on its details or even on its fundamentals. Non-Marxist scholars, and they form the vast majority, usually grant a grain of truth to the economic interpretation of history, provided it is not taken too literally and is swallowed down along with several grains of salt. (p. 71)

There is not a consensus on the details of neoclassical macroeconomics, either. Nevertheless, discussion over disagreements is essential for democracy; it is a constructive and positive feature for academics. However, Samuelson points this as a negative attribute of Marxist circles. Overall, looking at all the excerpts in which Samuelson discusses or explains Marx and related subjects in Chapter 4, we can conclude that his approach and wording is totally tendentious. Without showing sufficient counter evidence or any extensive argument he glosses most Marxist concepts over. This is in

line with one of McCloskey's conclusions that "Samuelson does not persuade by testing" (1998). As McCloskey figured, Samuelson, indeed, uses a rich array of literary and rhetorical devices for persuasion and his writings lack solid evidence. The dominant theme of his rhetoric in this chapter has been emphasis of negative other-description.

4.1.1.2 Individual Income and Family Income: Earnings in Different Occupations, Chapter 5

In the next chapter, Samuelson discusses earnings in different occupations such as unskilled workers, skilled craftsmen and white-collar workers. In the subsection where he talks about the white-collar "class", he attacks Marx again:

Contrary to the predictions of Karl Marx, these members of the so-called "petty bourgeoisie" have resisted sinking into the working class and have seldom offered fertile ground for unionization. On the contrary, observers of the rise of fascism in Europe have often claimed that the malcontentment of the white-collar workers, together with that of displaced small businessmen and shopkeepers, provided a fertile and receptive field for fascist agitation and propaganda. (p. 90)

This is the only paragraph, in this chapter, where Samuelson brings Marx up and he does it in a negative way, again. Neither does he elaborate on class analysis, nor discusses Marxist approaches about factory workers anywhere in the chapter. To do justice, one could discuss how some unions came to be controlled by capitalists; or the changing laws making unionization more difficult, which reduces the fertility of the ground for unionization. Textbooks, especially the ones which claim to be scientific, are supposed to present the debates without taking a stand. But Samuelson simply states his subjective position and leaves it there. Considering the main subject of the chapter, it was not really necessary to bring this up here anyway.

4.1.1.3 Social Movements and Economic Welfare, Chapter 26

Textbook authors usually write extensive books, including too many chapters to cover in one semester. For the most part, many instructors follow textbooks in the same chapter order as they are written. It is also very common that the last few chapters of textbooks are often not covered. Klammer calls these “to-be-left-out-when-time-runs-out topics” (1990, p. 141). Samuelson never brought up Marxist views between the 5th and 26th chapters. Since the 27th chapter is just a 2-page epilogue, the 26th chapter is essentially the last chapter of the book, and Samuelson left half of the coverage of Marx to the last chapter of his textbook.

Chapter 26 consists of two parts: 1) “Fascism, Communism, and Socialism; and 2) The Use of an Over-all Pricing System Under Socialism and Capitalism.” Basically, Samuelson categorizes socialism and communism, which are modes of production, with fascism, which is not a mode of production. Both capitalist and socialist countries could be run by fascist and totalitarian governments; however, Samuelson does not seem to reflect on this aspect.

He starts the chapter with:

After World War II, the outlook is radically changed. Socialist governments are in power in England, in France, in all of Scandinavia, in Italy, in all the Balkans and eastern Europe. Russia with its communistic government appears to be on the march. Fascism lingers on in Spain. In our own hemisphere, dictatorships are to be found in numerous countries of Latin America.

Only the United States remains as an island of capitalism in our increasingly totalitarian and collectivized world. Even here, the scene is drastically changed in the direction of strengthened powers of government over economic activities.

The capitalistic way of life is on trial. Not only must it perform adequately –more than that, it is required to perform superlatively. A

decade of unemployment here at home would have disastrous repercussions upon our prestige abroad, to say nothing of the internal political unrest that a slump would involve. (p. 584)

This is a very good example of “polarization” and “activities” discourse (Van Dijk, 2016). In the first paragraph, after mentioning several countries in Europe, he ends the paragraph by stating that in Latin America there are numerous dictatorships. Although not explicit, he relates socialism to dictatorships. This way, Samuelson highlights the underlying ideology by negatively presenting the out-group (socialist countries) and positively presenting the in-group (the United States). Actually, some of those governments he labeled as socialist were elected social democratic ones, such as the governments in Sweden and Norway. What is wrong about being socialist or social democratic if, under the parliamentary system, the majority of the people vote for the socialist or social democratic parties? Samuelson’s negative judgment of these elected social democracies can very well imply that he does not approve popular sovereignty if the elected government does not follow capitalistic policies.

Samuelson does not seem to be happy that the world is becoming increasingly collectivized. Further, as the American state strengthens its power over economic activities, Samuelson wishes capitalism to perform superlatively, so that the United States does not get collectivized. Here, it is clear that Samuelson is making a judgmental statement for what is good for the United States. On top of that, he is worried more about U.S. capitalism’s falling prestige abroad due to long years of high unemployment more than he is worried about the unemployed American citizens. He considers socialism as a threat and defending the capitalist ideology seems to be his priority. This is an almost perfect application of “activities” structure of discourse (Van Dijk, 2016). According to Van Dijk, “ideological groups are often (self) identified by what they do, that is, what

their typical activities are. Hence, we may expect that ideological discourse typically deals with what “we” do and must do, for example, to defend or protects the group (or the nation), or how to attack, marginalize or control the outgroup.” After polarizing “us” and “them” in the first two paragraphs, Samuelson, in the third paragraph, actively urges for a defense of the “us,” or the in-group (U.S. capitalism).

Next, under the “A Bouquet of Isms” subsection:

Men have always had visions of a more perfect society. Plato’s *Republic*, Sir Thomas More’s *Utopia*, Marx’s Dictatorship of Proletariat, and so on without number. (p. 585)

The impression here is that the capitalist societies have been sufficiently perfect but men have been visioning “more” perfect societies. After juxtaposing Plato’s *Republic* and More’s *Utopia* starting with capital letters (since they are titles of their books), he adds Marx’s “Dictatorship of the Proletariat” with capital letters, as if it is a book or a proper noun, as well. Clearly, he considers the “idea” of dictatorship of the proletariat as a utopia like More’s and Plato’s. This rhetoric marginalizes the out-group, which, in this case, is Marx.

In pages 586–587, he explains Marxian Communism and Soviet Russia to the reader:

Travel eastward from New York, and if you continue long enough, you will return to it from the west. Move far enough to the right and you will round the circle and encounter the extreme left-wing communist movement. For three quarters of a century after Karl Marx and Friedrich Engels issued their 1848 Communist Manifesto, numerous international socialist conferences were held; but outside the British Museum, not much was accomplished.

In 1917, the big moment arrived. Czarist Russia was knocked out of the war by Germans. Nikolai Lenin, a follower of Marx, was transported in a sealed railroad car across Germany and into Russia. Aided by Leon Trotsky, a one-time New York inhabitant, Lenin’s Bolsheviks snatched power from the more moderate regime that had overthrown the monarchy.

Preaching peace, promising land for peasants, and a dictatorship to the proletariat, the followers of the red hammer and sickle forcibly took power and gained adherents in the navy and army.

For an introductory economics textbook, it is really uncommon to see discussions of *The Communist Manifesto*, Lenin and Soviet Russia, however brief they are. Still, the negative wording perseveres. Using the ensigns of socialism, he mentions that power was taken forcibly. But nowhere in the book is any example given of a capitalist country which took power by force.

Samuelson was aware of Marx's main study topic was capitalism, not socialism.

The Soviet leaders had no blueprint to guide them. Marx had confined himself largely to the faults of capitalism, revealing very little of what the promised land was going to be like. It was not even on the timetable that backward Russia, which had hardly emerged from feudalism into capitalism, should experience its revolution before the downfall of the top-heavy industrialized nations. (p. 587)

In the case of Soviet socialism, it was a realized revolution, not an abstract and nonexistent utopia. However, Samuelson is not appreciating the existence of this experience at all; rather, he is taking it from the negative side and criticizing it on the grounds that Soviet revolution did not follow the Marxist historical projection. He is, again, using a condescending tone regarding socialism, mentioning it as a "promised land." Using this idiom, which is originated from the Hebrew Bible, he relates socialism to a heaven-like place in religious writings, creating a utopian sensation.

In the second part of this final chapter, where Samuelson talks about pricing in a socialist state, he opens the subject of labor theory of value and compares it to free-market pricing in capitalism:

What should be the role of land and other nonhuman productive resources as an element of cost in an ideal socialist state? Some people would say that such nonhuman resources should not enter into cost at all; that only human sweat and skill is the true source of value; and that any extra

charges based upon the cost of land and machinery represent a capitalistic surplus which the owners of property are able to squeeze out of the exploited laboring masses by virtue of the private monopoly of ownership of the means of production. This view is sometimes loosely spoken as the “labor theory of value”, and it is usually attributed to Karl Marx, the intellectual father of communistic socialism. Learned scholars dispute over just what Marx meant by the “labor theory of value”, and whether he intended it to be applied to a socialistic economy in the short or long run.

We need not enter into dispute. However, it is important to note that, in its simplest form, the labor theory of value will lead to incorrect and inefficient use of both labor and nonlabor resources in even the most perfect socialist society. So long as any economic resource is limited in quantity—i.e., scarce rather than free—the socialist planners must give it a price and charge a rent for its use. This price need not, as in the case of Astor millionaire under the capitalistic system, determine any individual’s income. It can be purely bookkeeping or accounting price set up by the planners, rather than being a market price. But there must be a price put upon the use of every such source.

Why? First, we must price nonhuman resources to ensure that a society is deciding *how* goods shall be produced in the best way, so that we really end up out on the true Production-possibility curve of society and not somewhere inside it. It would be absurd to get rid of the capitalistic system with its alleged wastes due to unemployment, and then by stupid planning end up far inside of society’s true production possibilities. (p. 596)

First of all, in the Marxist version of the labor theory of value, the value of capital goods (machinery) does enter into cost-price calculations. The value of capital goods is determined by both the current labor value and the past labor embodied. Samuelson, as he states, does not want to enter into a dispute on this issue, yet all he offers is some hand waving. He does not find a detailed discussion necessary but he finds it “important to note that, in its simplest form, the labor theory of value will lead to incorrect and inefficient use of both labor and nonlabor resources in even the most perfect socialist society.” This is another clear support for McCloskey’s contention that Paul Samuelson does not persuade by testing or evidence but by using rhetorical devices (1998). Samuelson argues that even in a socialist society there must be prices, but in Marx’s

theory, there is indeed a price, determined by the labor value. Samuelson thinks that in socialism, or at least in Marxist theory, nonlabor resources and machinery do not have any value because they are not living labor. Building on this incorrect supposition, he concludes that with some prices missing, the allocation of resources would be inefficient, which is a misleading conclusion partially derived from his reluctance to extend the dispute in the first place. In the end, an introductory reader would not notice this at all. The reader, regarding the prestigious and expensive textbook as a gospel, would take Samuelson's incorrect implications as the scientific truth.

Secondly, from "it would be absurd to get rid of the capitalistic system with its alleged wastes due to unemployment, and then by stupid planning end up far inside of society's true production potentialities," it is clear that he is supporting the capitalistic system. Using "alleged" as an adjective for unemployment, he does not seem to regard unemployment as a waste of resources, just like he wrote with concern about its disastrous impacts upon America's prestige abroad but not its impacts on the people.

Last but not least, Samuelson's selection of "stupid" to characterize "planning" is somewhat confusing. It is not all that clear whether he means there could a "smart" planning which would get the economy of production possibilities frontier or he considers all planning is stupid. Regardless, this usage is not a palatable one in a scientific text, just like "stupid advertising spending in capitalism" is not. Even if he meant the former, a more formal description could be, for example, "inefficient planning" rather than "stupid planning." Besides, production possibilities frontier is a theoretical construct and being on it under free markets is also a theoretical conclusion, which holds true under certain restrictive assumptions. There is no solid empirical evidence that

actual free markets lead to full employment and efficient allocation of resources. Indeed, capacity utilization statistics show that almost at all times there is idle capacity, that is, underutilization of resources. On the other hand, if we are to stay on the theoretical plane, the second theorem of welfare economics could also be used to argue that a society can achieve any given Pareto optimal (efficient) allocation via appropriate taxation under central planning. So, in theory, planning is not “stupid” at all; and, in practice, there is not much at hand to support that resources are fully and efficiently allocated in free markets either. Samuelson’s conclusions are completely unsupported and weak, at best.

At the end of the chapter (p. 605), Samuelson offers ten questions for discussion. A few of these questions draw immediate attention. In question 6, he writes: “For all its talk of planning and production for use, Soviet Russia employs its resources less efficiently than the United States and has a slower rate of progress than we do. Discuss.” Nowhere within the text Samuelson gives any evidence or discussion of the comparative progress patterns of Soviet Russia and United States; however, his discussion statement above is leading the reader to a specific direction. The question could have been phrased like “Compare the economic progresses of the United States and Soviet Russia.” Even this could be a directive, one given that within the text, the orientation is negatively biased towards the Soviet Russia but, still, in an ideal case, at least the wording could have been objective.

In another question, number 5, Samuelson asks: “‘I’d rather starve in free America than live off the fat of the land under totalitarian communism.’ Are these your sentiments? Why?” Here Samuelson presents an “us versus them” type of polarization structure and a hasty generalization that communism is totalitarian. Of course, he never

explicitly says that all communist countries are totalitarian, but he certainly will leave the student with this impression, which makes Samuelson's anticommunist rhetoric stronger and more effective.

4.1.1.4 Conclusion

In this subsection, a critical reading of 1st edition of Samuelson's *Economics: An Introductory Analysis* focusing on his treatment of Karl Marx, Marxism, socialism, and related topics as benchmark subjects, is given. My justification is that if an author has negative ideological bias towards nonmainstream thoughts in his writings then it would be more pronounced on the radical segments of the spectrum.

After examining 18 different places where Samuelson discusses Marxism and related topics, I argue that, without any exception, Samuelson's attitude towards Marxism and socialism is tendentious. He frequently uses literal and rhetorical devices to support a claim without showing solid evidence or testing. It is regarded that Samuelson's textbook is, and has been, relatively more progressive and pluralist than its competitors. Among others, presenting some discussions of subjects like Marxism, socialism, Soviet Russia, the labor theory of value, and *The Communist Manifesto* would lead to a false inference that the textbook is progressive. Instead, the tone of his rendition is firmly biased towards radical views in economics.

4.1.2 2nd Edition, 1951

Samuelson published the 2nd edition in 1951, three years after his first edition. He had made quite a few changes in the structure, adding 8 more chapters and reorganizing

the order of a few. As a result, the textbook, using almost the same page size and formatting, increases by 141 pages, to 762 in the 2nd edition.

Giraud (2011), studies specifically, the making of first ten editions of *Economics*, revealing the background dialogues and discussions among Paul Samuelson, MIT president Karl Compton, businessman Walter Beadle, and the publisher James McGraw. In his archival research, Giraud finds out that business circles had put a lot of pressure on Samuelson, Compton, and McGraw. Beadle had sent threatening letters to Compton (Giraud, 2011):

If [Samuelson's] view-points stem from an ingrained socialistic philosophy on the part of the author, then it would seem that more drastic correctives would be required with respect to the teaching of economics at the Institute. In any case, I believe that the Department administration is subject to severe censure for having permitted the text, in the form in which the Committee reviewed it, to be passed out to the students of Ec 11 and used as a basis for classroom instruction. It raises a question in my mind as to the competence of that administration. (p. 11)

Even though Samuelson's overall approach towards Marx and socialism was a negative one, it was not enough to satisfy the right-wing business circles and that Samuelson had been accused of carrying a socialistic philosophy. This shows how intolerant the American ideology was back in 1940s.

In 1947, one year before Samuelson published his 1st edition, Lorie Tarshis published his *Elements of Economics* textbook. William Buckley, a conservative author and commentator, and Rose Wilder Lane, another conservative author had harshly attacked Tarshis and his textbook (Colander & Landreth, 1998). Indeed, Tarshis was a student of Keynes and his textbook was one of the first comprehensively written Keynesian textbooks, with less theory and more policy orientation. According to Tarshis "the most important subject to be discussed in this book: [was] the theory of employment.

This theory is in a sense the keystone of our whole analysis” (1947, p. 339). In *Elements of Economics*, Tarshis’s main line of thought was active government policy to stabilize economic fluctuations. He was not discussing Marxism, not even a single mention. But during the years of McCarthyism, even being a Keynesian was considered to be a part of the socialist conspiracy. The perception of conspiracy turned out to be a reality; although Stanford University had backed Tarshis and academic freedom, in the markets the demand for the textbook plummeted, as professors were afraid to adopt his book for their courses (Colander, 2010). Therefore, a second edition was never published.

As a result of the pressures, in the 2nd edition, Samuelson had slightly cut down on his coverage of radical content, as there are 4 fewer mentions. Just like the 1st edition, the first time Samuelson discusses Marx is in Chapter 4, “Individual and Family Income”.

4.1.2.1 Individual and Family Income, Chapter 4

In this chapter, Samuelson introduces his first criticism of Marxism. However, in the 1st edition, there was a comment stating “Probably for half a century Marx was correct.” This, indeed, was one of the very few instances that he gave some supportive credit to Marx. In the 2nd edition, this part was removed.

What could be the reason? Three years earlier, Samuelson had thought that a century ago Marx was right, at least for a while. Had Samuelson changed his mind during those 3 years? But scientists do not change their minds without any legitimate and convincing reason. Had the data changed in 3 years in a way to falsify Marx? No, the data are from a century ago. We do not know why Samuelson removed that small

comment where he gave some positive credit to Marx; however, the pressures coming from the conservative circles is definitely suspect. One thing is clear, though, by removing that part the overall treatment of Marxism in the 2nd edition had become slightly less favorable, compared to the 1st edition.

4.1.2.2 *Competitive Wages and Collective Bargaining, Chapter 28*

This is a brand-new chapter and concept, introduced in this 2nd edition. After showing how wage is determined in perfectly competitive labor markets, Samuelson begins his criticism of Marx, under the subsection “The Iron Laws of Wages: Malthus and Marx”.

A quite different version of the iron law of wages was provided by Karl Marx. He put great emphasis upon the “reserve army of the unemployed.” In effect, employers were supposed to lead their workers to the factory windows and point to the unemployed workers out at the factory gates, eager to work less. This unhappy spectacle, according to Marx, would be enough to depress wages to the level of a subsistence minimum.

Let us try to show this on our diagrams. Figure 1a is redrawn as Figure 3 [in this paper, it is named Figure 4.2]. Suppose that the wage is at \$2 per hour and employment is at the level indicated by the point A. Sure enough, there will be unemployment just as was alleged. The amount of unemployment would be represented by the distance between labor supplied and demanded AB. In our simple, idealized model of competition, such unemployment could certainly be expected to put downward pressure on wages.

But does the basic Marxian conclusion follow? Is there any tendency for real wage rates to fall to a *minimum subsistence level*? None at all. There is absolutely no reason why in our simple model wage rates should ever fall below the equilibrium level at E. In a country well endowed with capital and natural resources, this competitively determined equilibrium wage might be a very comfortable one indeed as compared with wages in history and in most parts of the present-day world. In a less fortunate country, we should expect it to be lower.

Thus we reach an important principle: If competition in the labor market

were really perfect, there would be no necessary tendency for wages to fall to any minimum subsistence level. (p. 588)

This subsection is simply designed to press against Marx. The book follows a certain scheme; puts the mainstream theory forward, then marginalizes Marxism whenever possible. To support his story, Samuelson uses a sleight of hand here. As shown in Figure 4.3, Samuelson, without clearly stating it, makes an assumption that the subsistence level is below the equilibrium point E; so that, the competitive forces would eliminate unemployment but not below point E. Then, he reaches a supposedly important principle that “If competition in the labor market were really perfect, there would be no necessary tendency for wages to fall to any minimum subsistence level.” Similarly, another author might suggest another important principle: “If the subsistence level is above the suggested equilibrium point then the market forces would drive down the wage rate even below the minimum subsistence level.” Of course, these are not principles per se. It is a matter of where you put the location of minimum subsistence level. In essence, Samuelson and Marx agree upon the fact that reserve army of unemployed creates a downward pressure on wages. The distinction here is a result of an assumption whether the subsistence level is below or above the equilibrium. Marx has suggested a tendency, but Samuelson’s “very important principle” is merely built upon an assumption. Lastly, another point to be made is that the entire theory depends on the assumption of perfect competition, which does not bear any practical relevance.

The chapter where Samuelson compares fascism, socialism, and communism is the last chapter he brings Marx up; however, compared to the first edition, there is no change in terms of treatment or coverage of Marxism and related subjects.

For the 2nd edition, there are two points to be made, in brief. First, there is a small

reduction in coverage; the mention counts of Marx and related topics has gone decreased from 18 to 14. Second, Samuelson has taken one relatively positive section of Marx out and has added a new section that is clearly negative. So, we can conclude that the overall ideological bias towards the nonmainstream has gotten worse. This, as Giraud argues, could be due to the pressures came from conservative businessmen (2011). In the end, the draft of the 1st edition had been circulating among very few hands. As the actual edition was published, there had been a much wider reception highlighting the socialist tendency, as part of the conspiracy. Regardless, the major critique of this work is not personally against Paul Samuelson but to the ideological distortions his textbook and its spin-offs had been spawning. In that sense, both the initial ideological position in the first edition and its continuation harbor discernable biases.

4.1.3 3rd Edition, 1955

In this edition, as well, Samuelson made a few structural changes to his textbook. The number of the chapters increased from 35 to 37. The order of chapters also changed slightly. The mention counts of Marxism and related subjects increased from 14 back to 18.

4.1.3.1 *Introduction, Chapter 1*

Unlike the first two editions, Samuelson brought Karl Marx forward to the introduction chapter. At the end of the introduction chapter, Samuelson appreciates and shortly reviews Heilbroner's classic *The Worldly Philosophers* (1953). In his very brief review, he mentions Adam Smith, David Ricardo, John Stuart Mill, and Karl Marx.

Using a neutral, or even positive tone, Samuelson presents Smith, Ricardo, and Mill as “great thinkers,” but not Karl Marx.

Then our picture gallery comes to a black sheep, who was beyond the pale of the true classical tradition. Karl Marx, an exile from Germany, worked away in the British Museum vowing that the *bourgeoisie* would pay for the suffering his boils caused him as he sat working out his theories of the inevitable downfall of capitalism. (pp. 11–12)

Samuelson continues his unfavorable presentation of Marx. In the earlier paragraphs, he describes other classical thinkers as “great,” and Keynes as “all-round genius;” however, Marx is labeled as a “black sheep.” Although black sheep is sometimes used to refer to people who are just “different” in a neutral sense, in the last instance, it does have a negative connotation indeed. According to the Merriam-Webster Dictionary, the phrase “black sheep” means “someone who does not fit in with the rest of the group and is often considered to be a troublemaker or embarrassment”. This is a rhetorical means to portray the out-group as an annoyance.

Although Samuelson considers Mill as a great classical thinker, he makes a side comment “But though he developed the eighteenth-century classical system to its logical conclusion, he was led by the end of his life—some say through respectable love for a married woman, whom he later married—to a kind of Christian socialism” (p. 12). Being led to a kind of Christian socialism does not bear any meaningful relevance to Mill’s personality, his thought, or his work. By starting the sentence with “though,” Samuelson is implying that it is somewhat unfortunate that Mill was led to a kind of Christian socialism. This is another example of “us versus them” structure. Even for a politically unattached reader, it becomes clear who is “us” and who is “them.”

He had not made any changes to “Individual and Family Income” and “Competitive Wages and Collective Bargaining” chapters, Chapters 4 and 28,

respectively, regarding the coverage of Marx. However, he had carried, without changing anything, a few subsections from the chapter, “Alternative Economic Systems” to the appendix of Chapter 30 (“Profits and Incentives”), where he explains the legitimacy of profit earnings.

4.1.3.2 Problems of Economic Growth and Development, Chapter 36

In this new chapter, Samuelson discusses why some countries are economically developed and why some are underdeveloped. Then he points out six vital reasons as to why one needs to worry about underdevelopment. In number five, Samuelson builds upon the Ricardian theory of trade. In the previous vital point he makes, he asserts that rational self-interest of advanced nations requires other nations to be developed so that they can import goods that they can less economically produce at home (p. 708). No empirical evidence is presented. This is an opinion, not a fact. He focuses solely on the exchange sphere and concludes that trade makes everyone better off, of course, in theory. However, as Hunt (2015) argues, in economic thought, the vantage point shapes the conclusion. If you start your analysis from the exchange perspective, you end up with a harmonious economic society, but if you focus on the production sphere then you see class conflict. Samuelson claims that this analysis sets Marxist theory upside down. If anything, it the Leninist theory of imperialism which is set upside down. However, Leninist theory is too marginal to abuse; so, using the Leninist theory of imperialism, he canalizes the attack on Marxism. Later, he weathers the issue saying “Surely, it would be fruitless here to study the interplay of political and economic motives and tedious to try to draw up the detailed balance sheet of historical help and harm by advanced nations to

underdeveloped ones.” In this excerpt, Samuelson quickly slurs the controversial topic over. This is yet another instance on how Samuelson does not provide solid evidence but relies on rhetoric. “Then we might have been frankly troubled for an answer to the neo-Marxian theory of imperialism” is a very notable statement. It is easy to observe the in-group (We) versus out-group (neo-Marxian school) structure. Further, the implication is that the answer is not necessarily important for the sake of scientific advance but to save the mainstream’s appearance against the neo-Marxists. From the ideological perspective, this is actually a crucial mistake to pronounce the “us versus them” polarization structure starkly like this.

To sum up, in the 3rd edition, Samuelson had not taken out any of the earlier discussions regarding Marxism; indeed, he had added a few more mentions. However, in both of the new sections he criticizes Marx and modern Marxists. His arguments are not supported with any evidence at all. He leans against professional anthroponyms like “careful historians” and “numerous studies”; however, he neither gives a name, nor a title, nor a single reference regarding the historians or studies. Overall, we can conclude that from 2nd to 3rd edition the negative tone towards Marxism had grown further.

4.1.4 4th Edition, 1958

In the 4th edition, we see that mention counts of Marx and related increased by 11, from 18 to 29, a more than 50% increase. Again, a larger coverage does not necessarily imply that the ideological bias has decreased; as a matter of fact, it could have increased. Most of the sections had been remained as they were; however, there had been some slight changes and additions.

4.1.4.1 Introduction, Chapter 1

In the introduction chapter, Samuelson made a slight change to the paragraph where he labels Marx as a “black sheep.” To the end of the paragraph, he adds in parenthesis “(His own biography reads like a Balzac novel, not like a sociological science.)” Here, Samuelson was probably referring to *Frenhofer*, the main character in Balzac’s novella, *The Unknown Masterpiece* (2008). Frenhofer, in the novella, is a painter in search of perfectionism, working on one painting for many years. But no other artists were making sense of Frenhofer’s work. In one respect, Frenhofer was initiating a revolution in art by painting abstract pictures. Samuelson insinuates that Karl Marx’s life is more like an unusual artist not like a scientist. We also should not overlook that Samuelson has put Karl Marx closer to sociology, not to economics or political economy, by stating “sociological science” at the end.

4.1.4.2 Competitive Wages and Collective Bargaining, Chapter 28

As presented earlier, Samuelson, in this chapter, supposedly falsifies Marx’s reserve army of labor argument. He shows a diagram of intersecting labor supply and labor demand and draws the subsistence line ‘below’ the market equilibrium so that it is not binding. Then he claims that even though there is involuntary unemployment the wages would only go down to the market equilibrium, not necessarily to the subsistence minimum. [Figure 4.1]

In the previous edition, Samuelson did not draw a line but only mentioned it. This time he actually drew a minimum subsistence line, and he renamed the diagram from “Unemployment and Wage Reductions Under Competition” to “Karl Marx

exaggerated power of reserve army of the unemployed.” This new title is not even a proper title, rather, it is a statement. The concept remains the same, the message remains the same; yet, the title has been changed escalating the adverse connotation in the text.

4.1.4.3 Problems of Economic Growth and Development, Chapter 37

In the previous edition, Samuelson had six vital reasons as to why global underdevelopment should be worrying all the countries, even including the developed ones. In this edition, he had given seven vital reasons, the sixth reason being the new one.

6. Exploitation of colonial people? Followers of Karl Marx today realize that his prediction of falling real wages or “the law of immiseration of the masses” turned out dead wrong. English, American, French, German, and Scandinavian real wages have all been rising steadily under capitalism.

How can a Marxian explain this? By attributing the higher wages to trade-union and ameliorist reform movements? That would indeed be a bitter pill for revolutionary socialist to swallow and would in any case not explain the rise of wages in the most capitalistic country of all—America.

So for lack of better explanation, many Marxians try to explain the high wages of the advanced nations in terms of exploitation of the colonial peoples. Men drive new cars in Dayton, Ohio, because Burmese peasants starve. So goes the argument. Is there anything in it? (p. 757)

Samuelson gives five regions, in which the real wages were slowly rising. How about other capitalist countries? This argument is, indeed, part of the bigger liberal discourse; that is, ignoring poor and underdeveloped capitalist countries such as Colombia, Haiti, or Iraq but emphasizing the economic success of imperialist and militarist countries with free enterprise. Marx had not made any divinations; he formed testable hypotheses. In his conception, there is downward pressure on wages due to concentration of capital, labor-saving technologies, and reserve army of labor. There

could be events counteracting and reversing this for some time but the pressure is inherently there. The real wages might have increased since the Great Depression for 1) base effect of the depression, and 2) the New Deal. Since the Washington Consensus, during the neoliberal era, real wages have been stagnant and the wage share has been getting smaller in the United States, the most capitalistic country of all. History is dynamic; and, social scientists should consider the hypotheses dynamically as well. One cannot falsify a hypothesis just looking at the data for a certain period of time. In the end, Samuelson finishes his criticism off by asking a rhetorical question “Is there anything to it?” Scientific writing should not involve such rhetorical questions on debatable topics, without comprehensively explaining both sides of the arguments. Such questions could be asked in a classroom setting where there is interaction and a room for discussion. However, in a textbook, Samuelson is imposing a one-sided argument without sufficient evidence and then waving his hand by saying “Is there anything to it?” This is yet more evidence that economics, the way Samuelson and others do it, is a rhetorical science, as McCloskey advocates.

4.1.4.4 Alternative Economic Systems, Chapter 38

Toward the end of the very last chapter of his textbook, where he compares communism, socialism, and fascism, Samuelson included a very brief appendix chapter titled “Thumbnail Sketch of History of Economic Doctrines.” For a mainstream textbook, especially in comparison to modern textbooks today, this was a very progressive step to be taken. However, a careful discourse analysis would lead to a somewhat different conclusion.

Within the chapter, Samuelson calls for the appendix chapter:

The reader who has stuck this far now has a general knowledge of the economic analysis that is used all over the world—in the United States, Britain, Western Europe, Latin America, Africa, Asia—everywhere except beyond the Iron Curtain, where Marxian economics is the official monopoly. In a brief Appendix the family of present-day economics is shown: where modern economics came from, and the names of a few pivotal economists. (p. 781)

This implies that on the other side of the Iron Curtain the neoclassical synthesis is the official monopoly, or at least the dominant paradigm. Samuelson is only labeling Marxian economics as an official monopoly, not discussing the monopoly power of the neoclassical synthesis. Conceivably, he does not seem to have any problem with the neoclassical synthesis being the official monopoly but it constitutes a problem if Marxism is so.

In the four-page appendix chapter, Samuelson gives a two-paragraph sketch of mercantilist thought, about a page-digression on the Physiocrats and Leontieff's input-output model referring to Quesnay's *Tableau Economique*, a half-page description of Adam Smith and the Classical School, a half-page on Marx, and three short paragraphs on the 20th-century thinkers. After introducing early utopian socialists such as Owen, Sismondi, Fourier, Saint-Simon, and Proudhon, Samuelson, under the subtitle "Marx's "Scientific" Socialism versus Utopian Socialism," continues with Marx:

Karl Marx felt contempt for such utopians, just as he did for vulgar apologists of capitalism. Writing in exile, he studied works of Ricardo and particularly stressed the labor theory of value—that labor produces all value and if not exploited would get it all. He thought he could turn upside down Hegel's philosophy of matter's being in mind. Instead he gave an "economic interpretation of history" in which the conditions of production shape all ideology and in which the class struggle operates through the successive stages of feudalism, capitalism, inevitably toward a dictatorship of the proletariat—to be followed by a "withering away of the state" and a final classless equilibrium.

For capitalism Marx forecast falling real wages, falling profit rates, and underconsumption leading to greater and greater business-cycle crises. He looked for increasing monopoly control, imperialism, and finally inevitable revolution, and he naturally spurned mere reform of the capitalistic system. (pp. 785–786)

Actually, Samuelson, for the first time in the text, gave a fairly objective brief of Marxism in the excerpt above. He did not use heavy literal and rhetorical devices as he used to; however, he rocked the boat in the last sentence of the footnote:

Marx's economic tools split up a goods revenue, PQ , into labor costs, V ; into profit, S ; and into catchall of such earlier stages' costs as depreciation and intermediate materials, which he labeled C . Marx thought that a developing rise in C/V would cause the profit rate S/PQ to fall (provided S/V doesn't rise enough to offset!). Careful critics of all political complexions think this is a sterile analysis both of capitalism and socialism. But try to persuade 1 billion people of that. (p. 786)

Samuelson is asking for a persuasion, yet he is not persuading the billions either. He is using rhetoric and his position of authority to impose a liberal ideology. One last point to be made is regarding Samuelson putting fascism and communism into the same bag:

In defining fascism or communism, we were able to point to Nazi Germany or Soviet Russia. Socialism cannot be so easily described. Of course, we can describe the Swedish socialist government or the British Labor party's program, but these do not have such dramatic contrasts with our system. They represent a middle way. (p. 779)

Samuelson continues to discuss socialism alongside fascism. Although he does not directly state that they are the same, the student repeatedly reading socialism along with fascism would reach to the conclusion that these concepts are somewhat similar, if not identical. Also, it seems like Samuelson treats the *Union of Soviet "Socialist" Republics* as a communist state. This is an oxymoron because whereas socialism refers, mainly, to social ownership of means of production with the control of the state, communism usually refers to a further stage of socialism in which the state ceases to

exist. It is, indeed, common to use socialism and communism interchangeably without loss of generality, since the notional differences are not very large. However, academic textbooks require a more prudent and attentive writing.

To conclude, in this edition, the mention counts increased from 18 to 29. The coverage is larger in volume but the ideological bias had gotten more intense. Most of the additional sections regarding Marx and related subjects added to the ideological bias. There was only one section that is closest to be neutral. However, additional neutral sections do not fix the problem of ideological bias. For the neutral statement to make sense, the entire biased statements should be eliminated, which has not been the case so far.

4.1.5 5th Edition, 1961

In this edition, the coverage of Karl Marx had not, in any sort of way, changed in the “Individual and Family Income,” “Competitive Wages and Collective Bargaining,” “Profit and Incentives (appendix),” and “Problems of Economic Growth and Development” chapters. There are a total of 32 mentions, 3 more than the previous edition.

In the introduction chapter, Samuelson removed *The Worldly Philosophers* section, which included a brief touch on Karl Marx, which described him as a black sheep. To the “Alternative Economic Systems” chapter, he added a couple of more sentences:

Marxian communism represents a departure both from earlier utopian socialist movements and also from evolutionistic socialist movements of the last century. Karl Marx (1818–1883), who began as a student of Hegelian philosophy but ended up as the messiah of a new doctrine of

“scientific socialism”, worked in exile with his friend and financial sponsor Friedrich Engels to establish a whole new theory of economics and history. (pp. 822–823)

The above paragraph is a fairly neutral one without much judgmental or biased statements. In the new subsection titled “The Soviet Economy,” Samuelson explains that thanks to free universal education even poorer children could end up as a university professor enjoying some status. However, he, as usual, underplays the gains of the system and needles the politicians and bureaucrats. He never gives full credit where it is due. Most of the positive statements are followed by a negative critique. In the last paragraph, Samuelson concludes, “All in all, it is a mistake to think that everyone is miserable there” referring to Soviet Russian people (p. 828). Although this seems like a positive statement, which admits that there are well-off people, between the lines, he basically implies that the Soviet society is miserable, but not everybody. After writing about poverty and homelessness, the same statement would hold true for the United States as well: “It is a mistake to think that everyone is miserable in the U.S.” However, obviously, it would be a false hope to expect Samuelson to apply the same rhetoric for the United States, capitalism, and free-markets.

Also, to the appendix of the “Alternative Economic Systems” chapter, he added one more line in parenthesis “(When Khrushchev told Americans, ‘We will bury you,’ this reflected the Marxian doctrine of inevitability, p. 836).” This is, truly, a far-fetched connection. In real politics, leaders make offensive statements, even before Marx. When, in a press conference, a football team’s coach says “we will bury you” against their opponents, how relevant would this be to the Marxian doctrine of inevitability? However, as stressed earlier, Samuelson, in season and out season, pushes every limit to needle Marxism.

Samuelson modifies his incorrect terminology on the U.S.S.R. and no longer labels it as a communist state:

In defining fascism, we were able to point to Nazi Germany or fascist Italy. Socialism cannot be so easily described. Of course, we can describe Swedish socialist government or the British Labor party's program, but these do not present such dramatic contrasts with our system. They represent a middle way between our own "mixed system" and that of Soviet Russia and China. (p. 781)

This is the first instance where Samuelson separates Soviet Russia from fascist states. He regards that the U.S. economy is a mixed system as well as other socialist economies, but he implies that it is a large spectrum in which Soviet Russia and China are located on the far left, the United Kingdom and Sweden around the center left, and then the United States on the right of the middle.

These minor changes are somewhat neutral, not affecting the overall bias that had been strongly established since the 1st edition. From 1958 to 1961, for this edition, Samuelson had worked more on the reorganization of the chapters, as he also declares in his preface. Samuelson, for the first time, had moved "Supply and Demand" to Chapter 4, which was covered towards the end of the book in earlier editions. In this regard, this edition (1961) marks the beginnings of today's modern textbooks' content organization.

4.1.6 6th Edition, 1964

In this chapter, on one hand, Samuelson started shortening the text by eliminating some chapters, appendices, and topics; on the other hand, he added new chapters, the most important one being "The Theory of Growth", Chapter 35.

He did not make any changes in chapters "Individual and Family Income", "Profit and Incentives (appendix)", and "Problems of Economic Growth and Development".

However, in “Alternative Economic Systems”, he added a new subsection titled “New Looks in Iron Curtain Economics”:

Soviet Economics is in a state of flux. In recent years intense debates have broken out concerning the use of some kind of pricing and profitability criteria that begin to approach a little the analytical tools of Western economics. Marxian concepts seem to be reserved for training of the young and for alleged explanation of capitalistic economies. Among the high-level planners themselves, few words are squandered on such subjects. (pp. 804–805)

Indeed, most of Karl Marx’s work is all about the laws of motion of capitalism and its critique. Soviet Russia was a socialist country in which production and distribution are handled by central planning. There is nothing more normal than “high-level planners themselves” squandering few words on Marxism, and instead focusing on high-level planning. These types of irrelevant arguments could confuse the reader even further. After arguing that the Soviets are oscillating between decentralization and centralization, Samuelson closes the subsection with:

As already mentioned, the family tree of Marxian economics shows in the middle 1960s a branching out. China and Russia cannot agree on the true apostolic succession to Lenin and Marx. The Chinese bitterly attack the Russians for their policy of peaceful coexistence. These ideological splits be merely ironical, were it not that the future existence of the whole human race is at stake in this stage of the nuclear bomb. (p. 806)

It is clear that Samuelson, quite often, confuses Marxist economics with socialism. The former offers a paradigm to understand and explain how capitalism works, whereas the latter simply refers to a mode of production. The branching of Soviet Russia and China, as they are socialist countries, was more about the strategy, tactics, and real politics; the conflict did not have to do with the understanding of capitalism per se. Two countries did not start quarrelling because they could not agree on, say, transformation problem in Marx’s *Capital*. This confusion, equating Marxian economics

and socialism, remains in the following editions as well.

4.1.6.1 *The Theory of Growth, Chapter 35*

This new and important chapter starts with a discussion of stages of history.

Then, an immediate criticism of Marxism arrives:

The first step for any scientist is indeed to maintain a respect for the facts. But alas, it is not the last. The facts never tell their own story. Truth, like beauty, is oft in the eye of the beholder. No two writers ever seem to be told the same fables of developments by the accumulated almanacs of facts. Some, they included Karl Marx (1818–1883), saw history a one-way evolution. (p. 722)

The above paragraph is somewhat neutral; however, after giving a brief description of the stages of history (primitive culture, feudalism, capitalism, socialism and communism), under the subsection *Facts and Fiction*, Samuelson implies that Marxism is a fiction:

Events rarely agree with fable. Thus, the revolution in France and Germany that Engels and Marx predicted to each other in their letters failed to materialize in the weeks, months and years as they had confidently projected. And real wages, instead of falling or remaining constant in the decades since Marx's 1867 *Das Kapital*, turn out on statistical examination to have been rising dramatically under industrial capitalism. Even the profit rate stubbornly refused to follow the law of decline predicted for it, instead oscillating and wandering without any strong trend. (p. 723)

Maybe Samuelson was too early to abash Marxist hypotheses with golden statistics from the Golden Age of American capitalism. It is true that real wages had been rising in the United States up until late 1960s. However, real wages have not been rising since the Washington Consensus, for about four decades; and, the wage share has constantly been falling. There are many studies, Moseley (1991), Duménil and Lévy (2004), and Mohun (2006) to name a few, showing that there is a tendency for the profit

rate to fall, when calculated using appropriate measures. The objective here is not to validate Marxist hypotheses. Rather, historical hypotheses are subject to long acting scientific studies to be confirmed or falsified by empirical research. One study is not enough to prove or disprove economic theories. The point is that every attempt of Paul Samuelson regarding Marxism is designed to immediately falsify, without presenting any substantive and invariable evidence. Still, even if Marxist hypotheses are wrong, a scientist should neutrally study the phenomena. Using coarse language to discredit a school of thought is not a fair way to educate college students. It is difficult to think that Samuelson is doing this unintentionally. Because in his academic articles, he has, indeed, been using objective academic language. In the end, a very small academic community reads academic articles but the textbook's social impact is greater, making it a more important medium for discursive structures and strategies.

Samuelson then builds his *Ricardo-Marx-Solow Capital Accumulation Model* (p. 730), which is not a technical but a verbal and conceptual model. The mainstay of this model is diminishing returns to capital during its accumulation. Samuelson argues, "The return to capital, the interest rate per annum—or what is the same thing if we rule out the risk and technical change—the profit rate—will fall as capital deepens."

So, Samuelson, under certain assumptions, reaches the same conclusion that profit rate would fall, in theory. Later, relaxing the assumption of fixed technology, he states that technical advance could negate Ricardo-Marx law of the declining rate of profit (p. 733). He, indeed, agrees with the existing "tendency" of the profit rate to fall, and then he speculates that there could be forces counteracting that tendency. Therefore, his implication that Marxism is a fiction remains very unsubstantial. Another evidence for

the ideological bias in the textbook is:

The steady rise in wage rates is thought by many economists to *induce* employers to come up with labor-saving inventions. This tendency is often offered to help explain the failure of the profit-and-interest rate to fall as capital is accumulated. Marx more than a century ago had used such an explanation to account for the success of capitalists in resisting a rise in wages and in creating an industrial reserve army of the unemployed. Professors J. R. Hicks of Oxford and William Fellner of Yale have in our own day advanced similar arguments of an inherent bias toward labor-saving innovation. (p. 738)

Samuelson draws a parallel between Karl Marx and eminent mainstream economists Sir Hicks and William Fellner. As shown earlier, whenever Samuelson brings up Marx and related subjects he uses negative terms and adjectives like *black sheep*, *so-called class struggle*, *fiction*, and so on; however, as he brings up economists like Hicks and Fellner, who are not socialists, on a similar topic, he does not use a deprecating tone at all.

In this edition, throughout the textbook, there is a visible rise in the discussion of Soviet Union, as well. He argues that Soviets, although they had started from behind, had the potential to close the gap and catch up with the U.S. economy (p. 807). Due to this challenge from the east, he regards economic growth as the number one problem of the age (p. 778).

Overall, the additional mentions of Marxism are not as biased as some earlier ones but they are not fairly positive either. Although Samuelson kept the biased coverage intact, the share of neutral statements increased. He also increased the discussion of the Soviet economy, giving both statistical comparisons with the United States and further general examinations.

4.1.7 7th Edition, 1967

Karl Marx appears in the very first page of this edition. In the introduction, after presenting Adam Smith and John Maynard Keynes, Samuelson criticizes Karl Marx and the classical political economy (p. 1): “Thus, at almost the halfway point, there appeared the massive critique of capitalism by Karl Marx: *Das Kapital* (1867, followed by two posthumous volumes). A billion people, one-third of the world’s population, blindly regard *Das Kapital* as economic gospel.”

Rubin brilliantly responds to this:

If “a billion people” regard *Das Kapital* “as economic gospel”, it is clearly relevant to ask why only a few million Americans regard Samuelson’s *Economics* “as economic gospel”. Perhaps a balanced objective answer might be that “a billion people” find little that is relevant or meaningful in Samuelson’s celebrations of American capitalism and his exercises in two-dimensional geometry, whereas the few million Americans have no choice but to learn the “merits in the classical, traditional economics”. (1973, p. xi)

As a matter of fact, it is an irony that Samuelson’s *Economics* ended up being regarded as the “bible of economics” in the mainstream economics, if not yet in 1967. In the *Thoughts on the Forty-Sixth Birthday of a Classic Economics Textbook* section of the textbook’s 15th edition (1995), Samuelson writes, “Spread the **gospel** of economics any way, I can say” (emphasis added, p. xxviii). Also, in the foreword to the commemorative reprint of the first 1948 edition, which was published in 1997, he literally considers himself “building a cathedral” by publishing this book. Nelson (2014), while regarding Samuelson’s *Economics* as a progressive gospel of efficiency, also states that the textbook “may have been gravely flawed in terms of scientific understanding of the economy but as a work of religious art it worked much better” (2004, p. 70). Eventually, almost all of the Eastern bloc countries quit using *Capital* as a major text, and

Samuelson's textbook now reaches to a wider population, as a gospel.

Another example further clarifying the slanted position inherent in the writing of *Economics* is (p. 9), "Just as Galileo, Newton, and Einstein revolutionized perceptions in physics, so did Smith, Marshall, Keynes—indeed all the names that appear on the family tree of economics shown on the back flyleaf of this book—transform economic understanding."

He jumps from Smith to Marshall and then to Keynes. Among the important figures, Ricardo and Marx were skipped. Could this be an arbitrary choice? Maybe yes, maybe no. But in the family tree on the back flyleaf, Samuelson starts with the early philosophers like Aristotle, and later splits economics into two groups: neoclassical synthesis and socialism. The latter includes Karl Marx, Vladimir Lenin, the U.S.S.R., and China. From this tree, Samuelson only highlights the ones included in the neoclassical synthesis (Smith, Marshall, Keynes) as the revolutionary economists but does not name any of the economists in the socialist branch. This gets us closer to the sense that this was an intentional selection.

Samuelson adds a few of footnotes touching on Marx. Some of them are technical notes on Marxist labor theory of value (p. 720). Another straight quotation from *The Communist Manifesto* is given. From agriculture to gold reserves, discussion of the Soviet Union becomes more serious and detailed. Overall, although the biased tone is not much affected and mention counts of Marxism are not much different, there is larger coverage of general left-oriented topics, specifically regarding the economic performance of the U.S.S.R. and socialism. The default set of negative commentaries, carried since the first edition, remains; however, the additional discussions seem to be more neutral,

and their wording is less barbed.

4.1.8 8th Edition, 1970

This edition starts by including Marx's critique of capitalism in the very first page of the introduction chapter, as it does in the previous edition too. There is a slight but important difference, though: "Almost at the halfway point, there appeared the massive critique of capitalism by Karl Marx: *Das Kapital* (1867, followed by two posthumous volumes). A billion people, some third of the world's population, view *Das Kapital*, as economic truth" (p. 1).

Remember, in the 7th edition, on the very first page, Samuelson's wording on the same statement was, "a billion people, one-third of the world's population, blindly regard *Das Kapital* as economic gospel." He had removed the word "blindly" and changed the phrase "economic gospel" to "economic truth." "Truth" is not a socially or politically loaded word, but "gospel" is. On one hand, this shift is definitely is a progression towards a more neutral treatment; on the other hand, this contrast makes it clear that wording matters, even for Samuelson; it was not as neutral before and it needed correction.

Early in the book, in the second chapter, Samuelson gives a digression to the labor theory of value (p. 27). His main counterargument is that all versions of the labor theory of value (Smithian, Ricardian, and Marxian) do not take the diminishing returns to full extent, which, in turn, fail to explain the pricing in mature capitalism. He postpones the detailed discussion to a later chapter.

Despite the fact that Samuelson included a chapter on business cycles since the

very first edition, in the 8th edition he brought up Marx while explaining purely internal theories of business cycles (p. 243). Samuelson, taking the Keynesian perspective, was one of the first to explain economic fluctuations using accelerator and multiplier feedback mechanisms. He thought that both external shocks and internal dynamics play roles during business cycles. However, he was quite optimistic claiming that the business cycles were tamed saying, “democratic mixed economies are unlikely to experience old-fashioned prolonged depressions ever again” (p. 251). This shows Samuelson’s shortsighted vision while defending capitalism.

Later, in the “Distribution of Income” chapter, Samuelson discusses Oskar Lange’s views on the concept of exploitation. Lange proposes that one does not need the labor theory of value to argue for exploitation. He suggests that as long as the working people are not receiving any share of property income they are exploited. Using the neoclassical marginal product argument Samuelson states that Lange’s argument involves a “value judgment” (p. 523).

A new critique takes place in the “Economic Inequality”, which is a new chapter too. Referring to Ricardo and Marx, Samuelson asks the question “Inevitable Laws of the Dismal Science?” as a subsection header. He narrates; under capitalism, according to radical political economy, immiserization of the working class and widening income inequality is inevitable. His answer to this is:

Ricardo and Marx turn out to have been wrong about the laws of motion of politics, as well as economics. As every schoolboy now knows, the century since 1870 has been the century of state intervention in economic life. Gladstone and Disraeli in England and Bismarck in Germany began in Europe of the last century what Franklin Roosevelt and the Great Depression accelerated in America of this century—namely, the modern welfare state. (p. 764)

Ahistoricism, embedded in abstract neoclassical models, has spread to their

argumentation as well. Here, Samuelson is overlooking that history is dynamic and changing. During the 1930s, with the New Deal, the working class was in a stronger position; he uses this to falsify Marx and Ricardo. However, the Marxist framework presents a continuous class struggle. At times, the working class, for one reason or another, might improve its position if it wins the struggle, for that period. So, the welfare state was not there to stay forever. Indeed, history proved Samuelson's falsification of Marxism wrong. Towards the end of the 1970s, pressure on the welfare state shifted. During the neoliberal era, many of the benefits gained during the Golden Age were rescinded. For long-term historical analysis, data from a short period cannot be used as an evidence to falsify a hypothesis. This is exactly what Samuelson has been doing.

4.1.9 Conclusion

In this chapter, the first 8 editions of Samuelson *Economics* textbook have been covered, focusing on the ideological bias manifesting itself in the radical left-wing thoughts, specifically on Marxism. Although the coverage in terms of the mention counts has almost tripled from the first to the 8th edition, the treatment had not become any more neutral. As editions go by, the core coverage of Marxism grows, with the ideologically biased and misleading sections remaining intact. In each consecutive edition, most of the additional discussions of Marxism contributes to the biasness of the textbook. There are only a few exceptions, where Samuelson makes small wording corrections towards neutrality. Overall, from the first edition, there exists an underlying ideological bias towards radical left schools of economics and that bias has been solidified through eight editions. Table 4.2 displays the discursive structures Samuelson had been using to

present his prejudiced opinions.

The historical context of 1948–1970 explains the overall ideological disposition in the editions. The first editions began at the start of the Cold War. After World War II, the United States claimed its hegemonic position. In a peaceful environment, a capitalistic ideology developed and spread. As Giraud (2011) noted, conservative business circles put serious pressures on textbook authors during the late 1940s and 1950s. They wanted economics textbooks to be completely free market-oriented with little tolerance to left-wing ideas. This period was also the New Deal and welfare state era with big government, low unemployment, high unionization, increasing real wages, lower income inequality, and high-growth rates. Sometimes referred as the Golden Age of U.S. capitalism, the 1950s and 1960s marked the best decades of United States in terms economic performance. Still, the U.S.S.R. was ahead in the space race and this was a concern. Senator McCarthy was the leading figure of the political repression in the 1940s and 1950s. Thousands, including notable people like Albert Einstein, Bertolt Brecht, Charlie Chaplin, Jean Seberg, and Paul Sweezy, were blacklisted. Hence, considering the historical and economical context of the United States between 1948 and 1970, it is predictable to see such tendentious treatment against Marxism in economics textbooks.

4.2 Samuelson's Economics Between 1973 and 1980

In 1970, Samuelson received the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, which is marketed as Nobel Prize to enhance its prestige. Since the 8th edition of the textbook was published in 1970 before the prize and that there

is always a lag in the writing process and publishing time, the 9th edition (1973) is the first edition published after Samuelson received the prize. This marks a structural break in the treatment of Marxism. Three consecutive editions the 9th, the 10th, and the 11th bear visible differences compared to the earlier first eight editions and a great deal of similarities among themselves. In that sense, these three editions will be examined in conjunction with each other in this section.

4.2.1 9th Edition, 1973

This edition could be considered as a breakthrough, both for Samuelson's career and for his treatment of Marxism. In the first eight editions, there was a steady negative treatment of Karl Marx, Marxism, and related concepts. Up until this edition, changes between each subsequent edition were slow, somewhat shallow, and, for the most part, negative. Although the overall trend in terms of coverage was upwards, this did not lead to a neutral treatment. In this edition, though, the number of mention counts dramatically increases to 236. This figure was 60 in the 8th edition, and the average number of mention counts of the first 8 editions was approximately 27.

In the preface of this edition Samuelson made a very bold and attractive statement regarding Marxian economics:

It is a scandal that, until recently, even majors in economics were taught nothing of Karl Marx except that he was an unsound fellow. This was not out of intimidation by the plutocratic interests, but rather reflection of the fact that such independent and impassioned teachers of the last generation as John Maynard Keynes thought Marx sterile and dull. In this edition I have tried to treat Karl Marx neither God nor Devil—but as a secular scholar whom half the world's population deem important. The rudiments of mature Marxism, as well as the insights of the resurrected Young Marx, are newly discussed in this revision. (p. ix)

Samuelson says, above, “even majors in economics were taught nothing of Karl

Marx except he was an unsound fellow.” This was exactly how Samuelson had been describing Karl Marx, in his textbook. Samuelson labeled Karl Marx as a black sheep, and presented Marx’s writings as fiction. Although it looks like Samuelson is coming clean about the lack of detailed treatment of Marxism, he is not specifically confronting himself; instead, he is blaming academia by saying that this sort of presentation of Karl Marx is a scandal. Although this is an important step forward, it is a belated shift. As we will see, it will be a short-lived one too.

In Chapter 2, Samuelson mentions Karl Marx (p. 29): “Economies of scale are very important in explaining why so many of the goods we buy are produced by large companies, as Karl Marx emphasized a century ago.”

While making this statement regarding mass production, Samuelson is referring to Karl Marx as a historical figure. Although economies-of-scale is not necessarily a politically loaded concept, still, this mention is a fairly neutral one. There have not been many such neutral statements regarding Karl Marx and Marxism in the earlier editions.

In Chapter 3, he continues making neutral commentaries about Karl Marx (p. 54): “More than a century later, a slowdown strike by young GM workers in Lordstown, Ohio, protesting speed-up on the monotonous Chevrolet conveyor-belt assembly line, gives point to Marx’s prophecy.”

As a matter of fact, both of the statements above could have been made without any reference to Karl Marx and without a loss in argumentation. Inclusion of Karl Marx as a fulcrum, obviously, enhances the strength of the statements. Contrast this approach to Samuelson’s previous statements. Whenever he gave some partial credit for Marxist projections he also tended to trivialize them. In the above instances, though, Samuelson

had not turned to rhetorical and literal devices to depreciate Marxist thought.

In the “Profits and Incentives” chapters of earlier editions, Samuelson listed several different views: profit as implicit factor returns; profit as the reward to enterprise and innovation; risk, uncertainty and profit; profit as a premium for risk bearing; and, profit as a monopoly return. In this edition, he included a sixth view: profit as a Marxian surplus value. Since analysis of surplus value is in the core of Marxist economics this looks like a very fair, but belated and half-hearted consideration as Linder puts it (1977), because in the third footnote of the chapter, Samuelson cleverly advises the instructors that this part may be skipped. He takes the terminology with a fairly neutral approach in terms of the language, “surplus value is the ethically unwarranted mark-up over labor costs that causes the worker to toil part of the day for his own subsistence and the rest of the day for his capitalist exploiter” (p. 626). He gives a simple numerical example using labor hours as the basis of value category (p. 624). Also, he presents the views of both defenders and critics of property income as to whether it is ethical or not (p. 625).

In this edition, Samuelson starts a new chapter, titled “Winds of Change,” which briefly presents the evolution of economic doctrines. This is the first time he presents the history of economic thought as a full chapter instead of a short appendix. For an introductory textbook, an inclusion of an economic doctrines chapter is a very progressive step. It is hard to find such a chapter in modern textbooks. He starts the chapter with mercantilists, and then moves on to Adam Smith who he labels as the prophet of laissez faire. He frequently focuses on the invisible hand and how it lays the foundations of the general equilibrium of supply and demand (p. 841). However, he never brings up Smith’s working class sympathy.

After giving short treatments of the classical school, including Malthus and Ricardo, he presents neoclassical economics in line with the Austrian school. The Keynesian revolution is also discussed with reference to the Great Depression and *The General Theory* of Keynes. However, Samuelson mentions that mainstream economics is actually post-Keynesian political economy. He declares that whole of his textbook, prevailing most of the western world, had been devoted to modern post-Keynesian political economy (p. 845). Obviously, the post-Keynesian economics Samuelson has referred to in the 1970s is not the same as the post-Keynesian economics today. This title will eventually change to new-Keynesian economics later on, and the more radical strand of Keynesian economics will be named as post-Keynesian economics.

He also considers institutional economics as another important school of thought referring to Veblen as the “American Marx.” Galbraith’s critique of capitalism over his works, *The Affluent Society* and *The New Industrial State*, is given. The new left and radical economics also occupy a couple of pages. Marxists thinkers like Baran, Sweezy, Mandel, Gramsci, Marcuse, Fromm, and Goodman are briefly mentioned. Today, none of these mentions are made in standard mainstreams textbooks, not even in the latest edition of Samuelson’s textbook.

The lion’s share is given to Karl Marx, to give him a belated justice, as Samuelson mentioned in the preface. He presents a biography of Karl Marx as a subsection. There are neither Adam Smith’s nor John Maynard Keynes’ biographies in any edition of this textbook. There are 69 mentions of Marx and Marxism in this “Winds of Change” chapter only, excluding the appendix on Marxian economics, which is greater than the total number of mentions in any single edition of the text. In the appendix, titled

“Rudiments of Marxian Economics,” there are 82 mentions. The total amount of mentions shows the increased intensity of coverage in this edition, specifically in this chapter. Beyond the amount of mentions, the verbal tone of the presentation is properly neutral.

Samuelson adverts Engels as “an important intellect in his own right” (p. 852) and repeats the fact that Karl Marx has not received justice. While pointing to the distinction between the young and old Marx, he regards *Grundrisse* as a “monumental” work (p. 854).

To show yet another contrast in terms of the wording used to describe Marxist thoughts, we see that Samuelson uses the title “The Class Struggle and Dynamics of Social Life” for the closing subsection of the chapter. In the previous editions, Samuelson had been using “the so-called class struggle” where he had put the so-called adjective in quotation give a negative emphasis. He closes the chapter with a couple more praises to Karl Marx:

The appendix can be read by those who want to savor the flavor of traditional, mature Marxian economics. Before leaving Karl Marx, let us note that he was always more than a political economist. He was as much a philosopher, historian, sociologist, and revolutionist. And make no mistake. He was a learned man. To denigrate Marx, scholars sometimes point out that not all his ideas were completely original with him. Of course not. Ideas never are virginally new. As Whitehead said, every great idea was originated by someone who was not the first to discover it. How Marx synthesized, shaped, and promoted his ideas is what matters. And how they were received! (p. 855)

From the above excerpt, it is very obvious that Samuelson presents Marx with a completely different literal and rhetorical tone than that of earlier editions. Here, he is defending Karl Marx’s works and his synthesis of ideas. In the same subsection, “the economic interpretation of history by Marx and Engels surely ranks among man’s

greatest achievements” says Samuelson (p. 866). He concludes, regarding the proletariat’s struggle to bring an end to history, with a short quotation from Marx “‘this too will pass away.’ That is Karl Marx’s ultimate thesis.” Considering Samuelson’s earlier adverse commentary on Marxist analysis of history, this benignant reflection is a piercing contraposition. Previously, Samuelson had been quite harsh on Marx’s projection of history and had even blamed Marxism to be a fiction in this regard; indeed, that very same section is still there in Chapter 37, in this edition, creating an inconsistency between positions.

Another compliment, originally made by Isaiah Berlin, is directly quoted:

It is enough that Isaiah Berlin could justly say, at the beginning of his readable little biography, *Karl Marx* (Oxford University Press, London, 1939, 1948):

“No thinker in the nineteenth century has had so direct, deliberate, and powerful an influence on mankind as Karl Marx.”

This is all that counts. And this is what warrants our giving him a fair hearing and rendering him even-handed justice. (p. 853)

One probable implication is that Samuelson is latently confronting his earlier attacks and injustice on Karl Marx. That is why he is quoting another prominent philosopher to strengthen the respect to Karl Marx.

The appendix of this chapter, on the rudiments of Marxian economics, is an eight-and-a-half page long, a well-written and detailed summary. The treatment and wording is completely neutral. There are a few instances where one can easily censure Marx, although unfairly, such as his assumption of homogenous labor. Instead of attacking on this assumption by stating, “but since all labor is not homogenous the conclusions of this model would not follow,” Samuelson makes a footnote saying, “Marx, for simplicity, assumed all labor is homogenous. Or, if say, women are twice as productive as men in

both departments or industries, he'd reckon each woman-hour as 2 lowest-common-denominator man-hours" (p. 859). This is, indeed, a righteous way to discuss the strength of an assumption.

Samuelson briefly explains the notion of surplus value:

In short, a small group of thrifty or lucky capitalists, who happen to own "capital" (coal raw materials, and last season's corn to advance as food), can now garner a surplus—a profit, an interest rate, or as Marx would prefer to say, a surplus value. (p. 859)

Understanding surplus value as the source of wealth in capitalism is a very crucial Marxist deduction. In that regard, the notion of surplus extracted from the labor power could be an immediate attack point for the non-Marxists. However, Samuelson had neutrally equated the Marxist notion of surplus to the mainstream notion of profits. From this section in the textbook, an objective reader would see that surplus value and profit are just different elucidations of the same question.

Further, in the appendix, Samuelson walks through a numerical example of Marx's two-department model. He, then, without depreciating any of the concepts, explains the surplus value, exploitation ratio, and reserve army of the unemployed. Simple and expanded reproduction models are also studied with detailed tables and calculations.

Samuelson helps to correct another misreading of Marx regarding religion. After giving the famous quote "Religion is the opiate of the people," Samuelson defends Marx:

"Opiate in what sense? If you look up Marx's original quotation, you will probably be surprised to see what he meant there—not that religion is the elixir fobbed off by the ruling classes to dull the resentments and pains of the proletariat but that religion is an opiate in the sense of a comfort to wretched people." (p. 865)

One last objective addition in terms of ideological neutrality comes at the very end of the

appendix.

Immiserization and pauperization of the working classes are corollaries of the ineluctable laws of motion of capitalism. But, when one examines closely the texts of Karl Marx, it may be that all that is meant is (a) workers' relative share of GNP goes down; or that (b) this share fails to rise as fast as their legitimate expectations; or even merely that (c) workers under modern capitalism will feel increasingly "alienated". (p. 865)

Maybe one really needs to examine the texts closely because a large chunk of Samuelson's treatment of Marxism in the earlier editions came from not-so-close examinations. Indeed, this above paragraph shows a conspicuous contradiction within the text. Both in Chapters 5 and 29, Samuelson presents how Marx was wrong in his immiserization and pauperization hypothesis. In Chapter 5, he argues that Marx was wrong because living standards of the working class and the life expectancy of people are improving. In Chapter 29, using a supply and demand diagram, he shows that wages do not need to fall to subsistence level, if the equilibrium wage is above the subsistence wage. Then, at the very end of the book, he states that with a close examination the results he had drawn in Chapters 5 and 29 might not necessarily be true. This concession is an improvement, but definitely not sufficient. Because he is presenting the arguments negatively in the most-read interior chapters as the ultimate truth, he is then showing the other side of the debate at, literally, the very end of the textbook.

4.2.2 10th Edition, 1976

This is the edition in which Samuelson collaborates with another Massachusetts Institute of Technology faculty, Peter Temin, who is known for his empirical studies. He helped Samuelson update the historical data and statistics, bringing them to the decade of the 1970s. Beyond this update, there are a couple of completely rewritten chapters, a few

revised chapters and some slight changes. However, the coverage of Marxism and related concepts stayed pretty much the same. Almost all of the mentions remained unchanged. Only a few marginal changes were made, which did not affect the overall coverage and the ideological tone. In this regard, the 10th edition was more like a data update edition with some organizational changes without touching any sensitive topics.

4.2.3 11th Edition, 1980

The 11th edition starts with another strong confrontation on the first page of the preface:

What I owe you is a fair review of all the different schools of economics that have met the test of experience, logical analysis, and debate. John Maynard Keynes and Adam Smith, John Kenneth Galbraith and Milton Friedman, Karl Marx and Joan Robinson—names that are probably still vague to you—all deserve objective review. Then, over the years, you'll be able to forge for yourself a personal credo in economics founded in understanding and confidence. (p. vii)

Obviously, Samuelson is not directly admitting that his earlier review was not objective and fair. Nonetheless, why would an author, repeatedly revising and publishing textbook editions, make such a statement after 32 years since the first edition? Why would he, all of a sudden, need to say that abovementioned economists all deserve objective review? Why would he, as a prominent textbook author, owe us a fair review of all schools? This section of the preface is another confirmation of the main argument of this research that Samuelson's textbook, as the consensus introductory economics textbook, was ideologically biased. Notice that, Marc Linder's *Anti-Samuelson* was published in 1977, three years before the 11th edition of Samuelson's textbook. The positive reception of *Anti-Samuelson* might have stimulated Paul Samuelson to make some belated corrections.

Again, just like it was the case from the 9th to 10th editions, the changes regarding the coverage and treatment of Marxism were very small. The majority of the mentions remained intact. That being said, the 11th edition's overall revisions have been the most thorough one among the subsequent revisions, as Samuelson claims in the preface (p. vii). For the sake of this research, there are also some wording modifications in sections involving Marxism and related subjects. For instance, in "Incomes and Living Standards" chapter, Samuelson stated in the earlier editions that, "While some of Marx's predictions about industrial capitalism were proved correct in the intervening years, one prediction about the laws of the motion of capitalist development, entertained by many Marxists, has proved to be quite wrong." In this edition, Samuelson had removed the word "quite," making the aforementioned prediction "has proved to be wrong." This is a small, yet interesting change. Samuelson is still making the same statement, as an attempt to falsify a Marxist prediction, but this time he is making it with a somewhat more euphemistic wording.

In the "Winds of Change" chapter, the one with the largest coverage of nonmainstream thoughts, Samuelson asserted, "The economic interpretation of history by Marx and Engels may perhaps rank among man's greatest achievements" in the 9th and 10th. He might have thought that he had exaggerated the emphasis because in the 11th edition he had changed "among man's greatest achievements" to "one of many of their interesting contributions" (p. 797). The change is definitely not in favor of Marx and Engels, but still a positive statement overall.

There is a progressive ideological break in the 11th edition. Previously, he discussed leaders like Mussolini under the subsection of fascism but without any

reference to the mode of production, which was capitalism. However, often times, he related socialism to dictatorships. In this edition, the first time in 11 editions and 32 years, Samuelson transparently and decisively put capitalism next to fascism (p. 815). He opened a new subsection titled “Capitalist Fascism” in “Winds of Change” chapter. Mussolini, the Shah of Iran, Somoza, and Peron are mentioned as capitalist and fascist dictators. Even the Chilean counterrevolution was criticized (pp. 815–816). Of course, most of these improvements take place in the very last chapter of the textbook.

4.2.4 Conclusion

I regard the 9th edition to be a break point in the history of the textbook for two reasons. First, the volume of coverage in terms of the number of pages dedicated to Marxism and the amount of mentions. Mentions increased from 60 in the 8th edition to 236 in the 9th edition, almost a four-fold increase. Second, the language of the treatment had also improved. In the previous eight editions, Samuelson used literal and rhetorical devices on Marxism and related topics, frequently underrating them. Although the earlier mentions remain intact, the new material on Marxism is fairly neutral. In the 9th edition’s acknowledgment section of the preface, Samuelson, for the first time, thanks to Duncan Foley, who is a Marxist economist (p. xi). Foley, one way or the other, might have influenced Samuelson leading him to write a larger and more neutral treatment of Marxism; however, the extent of this inference is a mystery.

The relevant highlights of the 1970s are the Vietnam War, coup d’état in Chile, oil crisis in 1973, energy crises in 1979. The inflation rate in the U.S. was quite high, reaching to 13% in December 1979. Together with the crises, the United States

experienced a stagflation period. As the manufacturing sectors in the United States stagnated, Germany and Japan overtook United States in industrial production. The U.S.S.R. also remained powerful. The aftereffects of McCarthyism waned. The protests of 1968 and student movements called for a more democratic society. The survival of the Soviet Union and economic difficulties in the United States could have lead Samuelson to reevaluate the Marxist and new-Keynesian paradigms. Also, receiving the Nobel prize could have given him more self-assurance with the updates in his textbook. On the other hand, Eatwell (1973), Alchian and Allen (1972), and Sherman and Hunt (1975) entered the textbook market providing a more pluralist presentation. These textbooks might have been considered as potential threats for the market dominance of Samuelson. Hence, the improvements of the last three editions may have been precautions to protect Samuelson's market share.

In the final analysis, there were both visible and hidden improvements in terms of the ideological neutrality. Nevertheless, there was inconsistent and blurry coverage of Marxism. As Samuelson brought up new sections with neutral, or even favorable, wording, the earlier biased language continued to exist in other sections of the textbook. If a reader studies the whole textbook (either the 9th, 10th, or 11th), she would read many sections that disparage Marxism while other sections praise it. This would definitely confuse the reader. Also, although there are substantial improvements, we should not ignore the fact that most of these improvements had not spread to the textbook. The chapter with the largest coverage and the most neutral treatment is the very last chapter of the textbook. Most of the instructors, and students, would not advance that far in the text. And historical and critical perspective have never been institutionalized in economics

teaching. In that regard, it would be fair to say that these large improvements essentially remain very ineffective.

4.3 Samuelson's Economics Between 1985 and 1992

The improvements in the ideological neutrality during the 1970s, however ineffective they were, did not remain too long either. With the involvement of William Nordhaus, who received his undergraduate degree at Yale and Ph.D. at MIT, as an actual coauthor, most of these improvements were rolled back. In this sense, the 12th edition (1985) marks the new breaking point for the textbook.

4.3.1 12th Edition, 1985

This is the first edition that William D. Nordhaus coauthored with Samuelson. The majority of Nordhaus's research focuses on environmental economics. He is a hardcore liberal arguing that the problem with free markets is that sometimes the prices are wrong due to certain institutions and frictions; and, as long as the prices are corrected, free markets allocate the resources efficiently and solve the problem of externalities. This, essentially, is the basic approach of neoclassical economics.

With Nordhaus's involvement, significant changes arrive with respect to the ideological bias. Austrian economist Mark Skousen describes this new trajectory, which continues up through the latest edition (19th), as “from one cheer to two-cheers for the market” (2001). Skousen had been highly critical of Samuelson's Keynesian-heavy earlier editions and regards this trajectory as an improvement but an insufficient one, hoping for a three-cheers for the market.

In terms of the organization of the content, there were major revisions. Macro- and microeconomics parts were made clear. Relatively newer approaches in economics—such as rational expectations, Nash-equilibrium, Lucas critique, policy-ineffectiveness theorem—were introduced or incorporated with greater depths. Most of these are critical core neoclassical subjects. In these areas, the 1985 edition of the textbook can be seen as the closest primer of the modern-day principles of economics textbooks.

In terms of the wording, huge changes catch the eye throughout the book. As Skousen claims, most of these changes were made by Nordhaus and only reviewed by Samuelson, which makes the textbook more like a franchise with little direct contribution by Samuelson. Regarding the mentions counts of Karl Marx and related concepts; the offsetting contribution of Nordhaus is very visible. The number goes down from 237 in the previous edition to 99 in this one, which shows a clear structural break in terms of the coverage volume.

Recall that the first page of 7th edition Samuelson brought up Karl Marx, referring *Capital* as an “economic gospel.” In 8th edition, however, he had changed it to “economic truth” and it remained that way in editions 9, 10, and 11. This change was an improvement, however small it was. In this 12th edition, interestingly, Nordhaus changed it back to “economic gospel.” Although Samuelson had recently toned down his negative view of the Marxian doctrines towards a more neutral presentation, Nordhaus did not seem to agree with the milder Samuelson.

In Chapter 3, titled “Price Functioning in a Mixed Economy,” Samuelson previously discussed alienation concept, directly referring to Karl Marx. In this edition,

Nordhaus removes the direct reference and abridges the whole discussion (p. 54). Still some criticism of overspecialization is presented; however, it is definitely weaker than it was. Also, in the questions for discussion section at the end of the chapter, Nordhaus deletes the question asking students to discuss Marx's C-M-C' and M-C-M' concepts.

In Chapter 26, which is "Theory of Production and Marginal Products," Samuelson discussed exploitation under the subsection "The Concept of Exploitation"; Nordhaus changes this subtitle to "Do Firms Exploit Workers?" This is, clearly, a rhetorical question for which the implied answer is simply "no." In this chapter (pp. 587–591), Nordhaus explains that in free markets every economic agent is paid their marginal products. These marginal products could be very different from each other, yielding an unequal distribution. However, even though the distribution is unequal, as long as factors are paid their marginal products the economy would be efficient. This result, as one of the most substantial emphases of the free market ideology, is made crystal clear and thorough with a mathematical appendix (pp. 592–600).

Samuelson's spurious attack on Marxist iron law of wages was a classic. To repeat, Samuelson shows a labor market diagram where the supply and demand intersects above the subsistence wage rate. Then, he infers that wages would not necessarily be depressed down to subsistence level, as Marxists supposedly suggest. Obviously, this is an uneven presentation. If, theoretically, the subsistence wage is above the market equilibrium then the wages would fall below subsistence level. Apparently, Nordhaus had liked this devious example and keeps it as it is (pp. 622–623), while cutting many other somewhat positive or even neutral commentaries.

Recall, in the chapter where Samuelson discusses the determinants and sources of

profits, on top of the more mainstream views like profit as implicit factor returns, as the reward to enterprise, as reward for risk bearing, as monopoly returns, he included “profit as surplus value” referring to Marxism. This addition, which was a neutral one, was made in the 9th edition and had been kept in 10th and 11th editions. Nordhaus, on the other hand, completely cuts that subsection from the chapter. The alternative views which stayed in the textbook to explain the sources of profit are all from the mainstream thought.

The famous “Winds of Change” chapter was also exposed to serious alterations. “Winds of Change” and “Alternative Economic Systems”, as two separate chapters, used to be 46-pages added together. In this edition, Nordhaus merges them into one chapter “Winds of Change: Economic Alternatives” with only 23 pages. The very detailed appendix on Marxist economics is entirely cut off from the text.

Samuelson, at the beginning of every chapter makes a quotation from famous movies, novels, politicians, and economists wherever he sees appropriate and related to the chapter. At the beginning of “Winds of Change” chapter, he used the famous quotation “Up ’til now the philosophers have only interpreted the world in various ways. The point, though, is to change it” from Karl Marx. In this edition, Nordhaus replaces this quotation with a passage from Bob Dylan’s song “The Times They Are a-Changin’” (p. 759).

Not only are the chapters that provide diversity of views merged and shortened, this smaller chapter is now heavier on free-market arguments than it was before. Here, authors make one of the most provocative fallacies which has led to further repercussions. In the subsection “Classical Economics: Smith, the Prophet of Laissez-

Faire,” authors say:

It is Adam Smith’s greatest contribution that he glimpsed in the social world of economics what Isaac Newton had recognized in the physical world of heavens: self-regulating *natural order*. Smith’s message said, in effect:

You think you are helping the economic system by your well-meaning laws and interferences. You are not. Laissez-faire; let be; hands-off. The oil of self-interest will keep the economic gears working in almost miraculous fashion. No one need plan. No sovereign need rule. The market will answer all things. (p. 760)

First of all, the source of the quotation is very confusing. He refers to Isaac Newton’s “natural order,” and then brings a message from Adam Smith, in effect. There is no clear reference, though. Is Samuelson making a literal quotation from Adam Smith, or Isaac Newton, or what? There is not such paragraph in *Wealth of Nations* or any other works of Adam Smith. Indeed, this adaptation is an exaggeration of Adam Smith’s views on free market economies. The phrase “invisible hand” passes only once in a short paragraph in the *Wealth of Nations*. It is neither more nor less relevant than his other ideas in the *Wealth of Nations*. However, mainstream economics overpassing Smith’s working-class sympathy, cherry picks the “invisible hand” phrase and markets it as the point of origin of neoclassical theories making Adam Smith the prophet of free markets. The invisible hand is presented as a doctrine and as the kernel of truth (p. 760). Indeed, Smith’s so-called message had been misunderstood as an original quotation. For instance, Lindy Davies, the program director of the Henry George Institute and the editor of *Georgist Journal*, quotes the above false message referring directly to Adam Smith’s *Wealth of Nations*, instead of Paul Samuelson (Davies, n.d., para. 1).

Nordhaus introduced many praises to the Reagan administration for promoting free markets, freedom, and economic growth. He asks:

For most of the two centuries since Adam Smith, the critics of capitalism have fired their salvos from the left. But where are today's Marx, Engels, Proudhon, Gramsci, Baran and Sweezy? Are there none who would seize the mantle of leadership for revolutionary or even evolutionary change of our mixed economy?

Indeed, critics from the left today are few. One, who has raised his voice in criticism over the last three decades, mounting a challenge to the neoclassical orthodoxy, was John Kenneth Galbraith of Harvard University. (p. 764)

Where are they? Maybe Nordhaus should have asked this question to Senator McCarthy. Or, we should ask this to William Nordhaus who suppressed the diversity of perspectives in the 12th edition of the textbook. In the earlier editions, Marx, Engels, Proudhon, Gramsci, Baran, and Sweezy were mentioned and briefly discussed. But they were completely eliminated from the textbook. In the 11th edition, Samuelson wrote "any literate person should have some glimmering of acquaintanceship with the economics and thought of Karl Marx;" however, for Nordhaus, such diversity does not seem to be vital.

Under "The Radical Critique Today," Nordhaus with a somewhat cynical tone:

After an early wave of enthusiasm, the new left went underground. It hibernated during the turbulent 1970s as market economies were savaged by external shocks from oil and bad harvests. A conservative tide rose over the Western democracies, seen most vividly in the election of the Thatcher government in Britain and the Reagan presidency in the United States.

As conservative policies were introduced, left-wing thinking revived in response. The early 1980s witnessed several studies that questioned the efficiency, equity, and macroeconomic policy of American capitalism. What were the major themes in these criticisms? (p. 765)

He then gives a list of critiques: rejection of markets, rejection of modern macroeconomics, industrial policies, and greater equity (p. 766). Rejection of markets is not a well-grounded title. The radical left does not reject markets, per se. The markets, as long as they serve the purpose buying and selling, could be a part of any mode of

production. But the left rejects the dominance of markets over the people and the unequal positions of the actors in the markets under capitalism. Nordhaus says, “Modern economics views markets as good judges of people’s tastes and of the social costs of production.” With this specific wording, the implication is that mainstream economics is “modern,” but the radical left economics is not. A similar wording choice is in “rejection of modern macroeconomics.” Nordhaus tries to imply that we are living in a modern world and rejecting “the modern” is inept. These are examples of “us versus them” structure in discourse, us (neoclassical economics) being the modern and them (heterodox schools) being passé.

Although it is significantly shorter than it used to be, there is still a four-page brief of Marxism. It is still very interesting to see that even Nordhaus considers Marxism an economic system like socialism or capitalism. Marxism is a scientific paradigm explaining the dynamics of capitalism; it is not a mode of production. However, Nordhaus lists laissez-faire capitalism, Marxism, socialism and Soviet communism as alternative economic systems (p. 767).

The sections of “Biography of Karl Marx,” “Marx’s Schemata,” “Prophecies,” “The Class Struggle and Dynamics of Social Life” remained. Nordhaus did not touch much of the politically flat Marxist statements; however, the majority of the neutral and somewhat favorable treatments were all replaced by contemptuous wordings.

In the comparative analysis of the Soviet Union, Nordhaus shows the Soviet Union’s average growth rate under planning had been higher than that of Czarist Russia and the United States. Of course, these are objective data and there is not much room to underplay the observable and confirmable data. Still, Nordhaus indicates that Soviet

Russia's GNP was 53% of the American GNP. Then, he writes that this gap between the economy of U.S.S.R. and advanced capitalist countries is "not" closing (p. 776). Well, from the table provided on the same page, we see that between 1928 and 1984, the average growth rate of U.S.S.R. had been 4.9%, for the United States 3.0%, for the U.K. 2.1%, for Germany 2.8%, and for Japan 4.5%. This clearly shows that the gap is closing, indeed. Nordhaus could have chosen not to give any comparative data at all; however, the economic comparison of U.S.S.R. and U.S. was a hot topic back then and it is hard to just ignore it entirely. Nordhaus chooses to present the data but disregards the obvious implications. The result is a clear contradiction of the data figures shown and Nordhaus's explanation.

Recall that Samuelson, in the previous edition, criticized the counterrevolution supported by the Chicago Boys. For the first time, Samuelson perceived that in some countries, capitalism existed hand-in-hand with fascism. However, in this edition, all such objective considerations are wiped away, leaving the following paragraph as the dominant say on this issue (p. 767), "Yet, a decade later, country after country succumbed to dictatorship. Totalitarian fascism covered the map of Europe, displacing the market economies of an earlier era and raising questions about the future of capitalism and democracy."

Obviously, the triumph of totalitarian regimes raises questions to Nordhaus so long as they displace market economies. When fascism is used to establish free markets and capitalism, it does not raise any questions. Instances like Chile and Saudi Arabia are not discussed as totalitarian; presumably because these are capitalist economies.

Although the authors state that they commit themselves to give a fair spread of

views in the preface, there is a huge difference between the spread of views in editions, 11 and 12. In editions, 9 through 11, not only were there more than 230 mentions but also, the tone of Samuelson's language, at least for the new sections, was neutral and sometimes favorable. In 12th edition, with the involvement of Nordhaus, there is a perceivable negative shift in the volume of the coverage and the tone. Almost all of the sections touching on Karl Marx and related subjects have been modified. Many sections discussing Marxism in detail have been deleted. In some remaining sections, the alterations have increased the ideological bias.

4.3.2 13th Edition, 1989

In this edition, Nordhaus eliminates more of the radical left economists and views from their textbook. Even some completely neutral, politically irrelevant references are removed. One example is the reference Samuelson gave to Karl Marx as he explained the returns-to-scale concept. That was a completely neutral, fair, and politically irrelevant reference, but Nordhaus decided to remove Marx's name there. On the other hand, the classic example of Marxist iron law of wages section and figure, which is a biased attempt to falsify Marxism, remains intact.

One new addition by Nordhaus comes in the "Winds of Change" chapter:

A century ago the family tree of economics branched. One branch grew from Karl Marx's *Capital* (1867, 1885, 1894) and his earlier writings. This line, important for understanding the economic organization of communist countries, will be analyzed in section B of this chapter. (p. 827)

It is obvious that Nordhaus has not read Marx's *Capital*. Nordhaus says that the branch of economics that grew from *Capital* is important for understanding the economic organization of communist countries. To start with, this is a big misunderstanding. Karl

Marx's *Capital* is about the understanding of capitalism, as the title speaks for itself. Marx's *Capital* does not offer any understanding regarding the organization of communist countries whatsoever. Freshman students regard the college textbooks as the source of ultimate knowledge. This misrepresentation makes the reader relate Marxism directly to Soviet Communism. And then, as Nordhaus puts fascism next to communism, the straightforward connection leads to Marx's *Capital* being the theoretical basis of fascism, which, in fact, studies capitalism.

The section devoted to Marxism, which was already shortened in the previous edition, is even shorter in this one. "The Class Struggle" subsection is completely removed. The concept of class struggle is at the heart of Marxism. It is hard to explain Marxism without discussing class, conflict, and struggle. This is almost like explaining capitalism without talking about markets. From the ideological perspective, reducing society to individuals is very crucial. Bourgeois economics, employing methodological individualism, disregards classes and historical dynamics. In this regard, deleting sections referring to class struggle could be explained by this awareness.

Aside from the deleted and modified sections, there are a couple of additions.

The tone of the language becomes even more biased and sharp-tongued:

As the decades passed, it became clear that Marx's drama was not being played according to his script. Workers were enjoying ever-growing real wages and shorter hours, and labor's share of the national income was slowly growing. Workers were gaining political power through ballots not bullets. The rate of profit showed no tendency to decline for innovations constantly replenish the stock of domestic investment opportunities. (p. 835)

We see that Nordhaus, as well, is using literal techniques to reduce the perceived position of Marxism. Labeling Albert Einstein's testable hypothesis as a "drama" would not be appropriate. Here, "drama" implies that Marx's hypotheses are not scientific but

like theatre plays. This way of attacking on Marxism, or any other school of thought, is borderline childish. Another instance is the phrase “through ballots not bullets.” The underlying assumption is that Marxism had led to “bloody” revolutions, using bullets. Again, Nordhaus does not seem to read about Chile, Saudi Arabia, or other capitalist countries where there are “bloody” dictatorships. However, just like Samuelson, Nordhaus is too quick to jump to conclusions. Since the late 1970s, the real wages have been flat and stagnant with some slight negative tendencies. Scientific hypotheses in social sciences are not proven or disproven with data from a short period of time. But whenever current circumstances challenge a widely held hypothesis, the hypothesis’s proponents tend to increase attacks on alternative views, which turns out to be a mistake. Each systemic crisis is believed to be the last one; “this time is different” has become the maxim of every collapse; but the cycle repeats itself.

One interesting point is that, the authors seem to admit that Soviet economy has actually been growing rapidly:

We now turn to a detailed study of the workings of the Soviet Economy. This subject is of great importance not only because the Soviet Union is locked in a political struggle with the United States. In addition, the Soviet economy is proof that, contrary to what many skeptics had earlier believed, a socialist command economy can function and even thrive. That is, a society in which the major economic decisions are made administratively, without profits as a central motive force of production, can grow rapidly over long periods of time. (p. 837)

This is only two years before the dissolution of the Soviet Union. The authors might have regretted making this statement because after the dissolution they are going to revert their thinking. But still, this creates confusion and contradiction. Throughout the entire textbook, they satirized socialism and the Marxist critique of capitalism, but here they have appreciated the fact that socialism actually works. Of course, when something

becomes unignorably substantial, the ideology has to absorb the plain facts.

To sum up, Nordhaus' influence makes its presence felt even stronger. The overall ideological bias in the 13th edition had increased compared to the 12th edition. The volume of the coverage is more or less the same, however, the modifications make the bias harsher and more apparent.

4.3.3 14th Edition, 1992

Although this is the first edition after the dissolution of the U.S.S.R., there were only a few months between the dissolution and the publishing of this edition. Due to this short notice, it is fair to think that the authors could not have prepared sufficiently to reflect the dissolution in this edition. Yet still, some small but visible changes have been made referring to the U.S.S.R.'s transition to capitalism. A more thorough reflection and further ideological interventions were left to the 15th edition published in 1995.

In his personal preface, Samuelson discloses that his book “got its share of condemnation” under McCarthyism (p. xi). On the surface, Samuelson has been supporting not a socialist but a mixed economy, a free-market capitalism with a touch of state intervention to stabilize the fluctuations. But back in the 1950s, even an apology for a mixed economy with some Keynesian tones was not acceptable. This could partially explain why Samuelson's treatment of Marxism was so biased. However, in the 1990s, there was no such direct pressure anymore; yet still the treatment is more biased than it has ever been.

Also, he starts a nice rhetoric on page xiii, asking the question “Science or Art?” He acknowledges that economics is not an exact science but says that it is still more

science than art. Is this the main question to be asked, though? The more relevant question in this context would be “Science or Ideology?” Nowhere in this subsection does Samuelson mention the ideological aspects of economics. The implication is that economics is a science with some artistic aspects. This is called diversion. If you do not even bring the question up, the reader never gets to think that economics could be ideological. Towards the end of his letter:

The subject of economics is an ancient and honorable one, still growing and still having a long way to go before approaching the state of tolerably accurate science. It began really with Adam Smith—our veritable Adam—who wrote in 1776 that great text called *The Wealth of Nations*. Then in 1848 John Stuart Mill, clocked with the highest IQ of all times, wrote *The Principles of Political Economy*, which served as the layperson’s bible until 1890, when Alfred Marshall prepared his definitive *Principles*. (pp. xiii–xiv)

Throughout the earlier editions of the textbook, you could barely see substantive references to John Stuart Mill. In fact, in the 11th edition, there were only 8 pages where Samuelson ever mentioned Mill, most being passing references or direct quotations at the beginning of two chapters. Karl Marx, on the other hand, had been a more important historical figure for Samuelson, especially in the 9th through 11th editions, at times with laudatory remarks. Somehow, such a “great thinker,” as Samuelson used to call him, does not get any reference in the previous paragraph but John Stuart Mill, who is really an insignificant figure in this textbook, is honored. The figures who have studied the society from surplus perspective, like Karl Marx and David Ricardo, are disregarded.

The actual preface, written by Nordhaus and Samuelson, after stating the major structural changes, ends with “A Word to the Beginning Student”:

Human history has witnessed waves of revolutions that shook civilizations to their roots—religious conflicts, wars for political liberation, struggles against colonialism, and nationalism. Today, the countries in Eastern Europe, in the Soviet Union, and elsewhere are wrenched by economic

revolutions—people are battering down walls, overgrowing established authority, and agitating for a “market economy” because of discontent with their centralized socialist governments. Students like yourselves are marching to win the right to learn from Western textbooks like this one in hopes that they may enjoy the economic growth and living standards of market economies! (p. xx)

It is evident that these changes in the Soviet bloc have taken place during the early 1990s. It is very normal for ideologically loaded politicians and activists to celebrate revolutions and reforms towards the direction of their ideology; however, for a scientist, these events should be received with neutrality and philosophy. The dissolution of the U.S.S.R. happened only a couple of months before the printing of this edition. There was not any clear outcome to talk about, at all. Every social change is not necessarily a good one. However, Nordhaus and Samuelson seem to be very rhapsodical about these changes in Eastern Europe. Also, note that only three years ago, in the 13th edition, the authors stated that the Soviet economy was proof that socialism and command economies could work and prosper.

Today, after more than two decades of data and observations, we have started to receive some comparative survey studies and scientific papers. Of course, there is nowhere near an unanimous conclusion on whether the shock doctrine helped these countries or not, but there are still enough publications to argue against. To give a couple of counter-examples to Nordhaus and Samuelson; Dragomir shows how and why the majority of Romanians want socialism back (2009). Romanians have been complaining about unemployment, lack of social security, homelessness, increasing poverty, lack of public infrastructure investment, and the increasing crime rate since 1989. According to the opinion poll of IRES (2010), a Romanian think tank, 66% of Romanians have said that, if Nicolai Ceausescu were alive, they would vote for him in the next election.

Notzon et al. (1998) shows the declining life expectancy of the Russians during the 1990s due to deterioration of the health-care system, poor nutrition, and depression under capitalism. One could find studies showing improvements in living standards or life expectancies for some Eastern bloc countries or for a specific period of time, as well. The point is science, ideally, advances with comparative discussion of competing research. After the dissolution of the Soviet Union, before any clear outcome became evident, authors cheer about the transition to capitalism shows their political inclination.

Although not relevant for the main analysis of this research, it is worth mentioning that there is an important change in the overall structure of the 14th edition. For the first time ever for this textbook, a microeconomics section was placed before macroeconomics. The reason, according to the authors, is that macroeconomics would be much more appreciated if students learned microeconomic basics first. Also, microeconomic foundations of macroeconomics were incorporated into various chapters. In this case, the 14th edition of the textbook gets even closer to the modern counterparts in the structural design as well. All these, as discussed earlier, are outcomes of the insistence on methodological individualism as well as official methodology.

The introduction of the textbook immediately starts with a negative propaganda against socialism on the very first page. Authors in the “Have You Ever Wondered...” subsection ask, among other questions, the question “Why have the countries of Eastern Europe rejected socialism and why are they flocking to construct a market economy?” (p. 2). After critiquing Karl Marx, the authors assert that countries in the Eastern Europe are rediscovering what Adam Smith suggested “two centuries after he wrote *The Wealth of Nations*” (p. 3). Here, the implication is that these countries are so backwards that they

have yet to rediscover these ideas, as if Smith had the last word on everything. Nordhaus and Samuelson did not know yet, that in the future of capitalism, some of those countries would end up worse than they were in 1990s.

“Winds of Change”, which had been the chapter where one can see the widest spread of ideas with a neutral presentation, had now literally turned into a “How Marxism Failed?” chapter. As the authors declare, this supposed failure is the ultimate promise of the chapter in this edition (p. 375): “What were the events that led to the rejection of the Marxist model and the triumph of the market? This chapter is devoted to this question.”

Even the full title of the chapter is modified. What used to be “Winds of Change: Evolution of Economic Doctrines” had been changed to “Winds of Change: The Triumph of the Market.” There is nothing wrong with presenting the evolution of economic doctrines. The dominant theme of the textbook is mainstream economics and this has been the only chapter with some sort of pluralism; however, the intolerance of Nordhaus led to the hammering of socialism, even in this marginal chapter.

When he is discussing Ricardo, Nordhaus states, “He presented a careful analysis of labor theory of value.” Actually, all of the history of economic thought textbooks present Ricardo’s labor theory of value as a very naive one, which yields meaningful conclusions only if there is only one good in the economy. As one, realistically, generalizes the model with many goods then the model simply fails to generate explanatory results. But according to Nordhaus, Ricardo’s version of labor theory of value is an elaborate one. One reason for this superficial commentary could be that Ricardo’s law of comparative advantage is still the basis of mainstream international trade theory. Just like Adam Smith is presented as the father of free markets without

discussing his theoretical fallacies, presenting Ricardo with cherry-picked arguments supports the mainstream ideology.

In this edition, the biography of Karl Marx section was completely removed. Instead, a new subsection “The Central Dilemma: Market vs. Command” was written (p. 384). It is titled as a dilemma, but after reading Nordhaus’s one-sided presentation, it is hard to think that there is such a dilemma. The cynical quotation marks return in the Marxism subsection, “Marx attempted to deduce ‘scientifically’ the inevitable transition from capitalism to socialism” (p. 385). We see that the term “scientifically” is used within quotation marks to show sarcasm and irony. Then Nordhaus comes to the implication that since U.S.S.R. is dissolved, “it became clear that history was not following Marx’s script.”

Now that it is dissolved, there is a longer subsection reserved for the post-Soviet Russian economy. Nordhaus presents a quotation from *The Abalkin Report*, which explains the main tenets and objectives of the market reforms being considered in Russia. After the long quotation, Nordhaus makes the same mistake again, mixing central planning with Marxism: “But stating the goal was not enough. To make the difficult transition from Marx to market would require both political will and the economic wisdom to make the necessary steps” (p. 391).

What does the “transition from Marx to market” mean in real politics sense? Marxism is not a mode of production, neither does it means central planning. Marxism is not an alternative to markets. It is a paradigm that explains how capitalism and markets actually work. Further, under Alternative Economic Systems, Marxism is listed as an economic system among socialism and communism. It is hard to tell whether Nordhaus

cannot tell the difference, or if he is intentionally referring to Marx to blur the concepts. Either way, the outcome is misleading and confusing for the students.

Overall, the main ideological theme of this edition had been spurred from the dissolution of the Soviet Union. This disintegration was celebrated to be the end of history (Fukuyama, 2006) and that liberal ideology surely gained an edge over the socialist ideology. This break, obviously, had not gone unnoticed by Nordhaus and Samuelson. Nonetheless, since the dissolution happened only a couple of months before this edition was printed, the textbook reflection of the dissolution had been somewhat fragmentary and facile. They give a wider scale changes in the 15th edition (1995).

The shift in the presentation of Marxism in the economics textbooks is essentially problematic. The Soviet Union's mode of production was, at least in theory, socialist central planning. This does not have anything to do with the Marxist analysis of capitalism. Socialism and Marxism are two different concepts. Socialism is a mode of production. On the other hand, the main arguments of Marxism are 1) capitalism is a class society, in which two classes have conflicting interests; 2) the wealth of the bourgeoisie is accumulated over the surplus the laborers produce; and 3) the crises, explained by internal contradictions of the system, are inherent to the capitalism. The U.S.S.R., which was really a mixed economy heavier on socialist side, politically decided to make radical reforms towards a more market-heavy mixed economy. Still, capitalism, as a world system, is the dominant mode of production in the world and it is still subject to the Marxist critique. With the disintegration of the Soviet Union, if anything, the success of socialist mode of production might have been questioned, not Marxism. The main arguments of Marxist analysis still apply. The U.S.S.R.'s dissolution does not

invalidate the Marxist critique of capitalism. In this sense, it could be understandable for a textbook author to gradually minimize the sections focusing on the Soviet Union and central planning; however, as capitalism spreads, the treatment of Marxism becomes more relevant, not less. Yet, Nordhaus, on the basis of the dissolution of U.S.S.R., minimizes the sections involving Marxism in the textbook. Not only does the coverage shrink but the language becomes more offensive, contemptuous, and biased.

4.3.4 Conclusion

There are two important changes, regarding the textbook, between the years 1985 and 1992. The first one is the coauthorship of Willian Nordhaus which started with the 12th edition in 1985. Nordhaus has been harsher and stricter than Samuelson with the ideological imposition. The second one is the dissolution of the Soviet Union. However, this political event has not been reflected extensively in the 14th edition. A more thorough reflection has been provided in the 15th edition in 1995.

Looking at the historical context, we see that these are the beginning years of the Washington Consensus. This era could be characterized by smaller government, lower taxes, privatizations, price stability, central bank independence, financialization, and lower rate of unionization. Leaders like Reagan, Thatcher, and Kohl all started to implement these neoliberal policies in their countries. The International Monetary Fund (IMF) and World Bank forced peripheral countries to follow the same course by imposing a one-size-fits-all economic reform package. The debt-to-GDP ratios of developing countries increased. This created an excuse to take the IMF pill. And the dissolution of the Soviet Union made neoliberalism more appealing and easy to market.

China, as well, made economic reforms towards a market socialist economy. Hence, a revival of market fundamentalism was the definitive feature of the late 1980s and the early 1990s. This revival had to be reflected in the textbooks of the era. Nordhaus, whether intentionally or not, played this very role of reforming Samuelson's textbook in a way to enhance the liberal orientation and mute Marxism.

4.4 Samuelson's Economics Between 1995 and 2010

The 14th edition (1992) was the first edition after the disintegration of the Soviet Union. But since there were only a few months in between, its effects on the textbook's content were very limited. However, as Samuelson also states in the memorandum, the Soviet disintegration becomes one of the major themes of the 15th edition. For this reason, 15th edition can be regarded as the last breaking point, for the sake of this research. The ideological structure built into this edition perseveres until the latest edition (2010) without any visible changes.

4.4.1 15th Edition, 1995

This edition starts with a special memorandum by Samuelson, "Thoughts on the Forty-Sixth Birthday of a Classic Economics Textbook." In the first paragraph of this memorial Samuelson states, regarding his textbook, "Even the former Soviet Union let this Trojan horse get translated into Russian, thereby contributing to the downfall of a command economy run inefficiently by totalitarian bureaucrats." This implies that, after all, the Soviet education system was not that "totalitarian." There was a good deal of pluralism of ideas in the Soviet Union. Even in Cuba today, at the University of Havana,

neoclassical economics with in-depth mathematics is taught in “Capitalismo” classrooms, and Marxist economy along with socialist planning is taught in “Socialismo” classrooms. It is hard to find the same pluralism in the American education system. Further, Samuelson admitted one more time the fact that these textbooks can affect society and politics.

He defines the disintegration of the Soviet Union as one of the major themes of this edition:

One major theme must weave in and out of our new edition and every turn-of-the-century economics textbook. With the final collapse of the Lenin-Stalin-Gorbachev totalitarian Soviet system, victory has been declared in favor of the *market-pricing* mechanism over the *command* mechanism of regulatory bureaucracy. (p. xxx)

In light of the earlier biasness of Samuelson one can tell that this sounds more like a congratulation of a political ideology rather than a scientific harvest.

As the preface presents the contextual changes, the earlier emphasis regarding the fair treatment of other ideas had gotten weaker. Focus is predominantly on the triumph of markets. The promise of pluralism is limited to:

There is also a marketplace of ideas, where contending schools of economists fashion their theories and try to persuade their scientific peers. You will find in the chapters that follow a fair and impartial review of the thinking of the intellectual giants of our profession—from early economists like Adam Smith, David Ricardo, Karl Marx to modern-day titans like John Maynard Keynes, Milton Friedman, and Robert Solow. (pp. xxxvi–xxxvii)

This is a misrepresentation, indeed. There is not a marketplace in the textbook where the contending schools of economists fashion their theories and try to persuade others. It is the authors, Samuelson and Nordhaus, narrating these contending theories, which is a biased narration.

The coverage of Marxism and related topics is even thinner in this edition. There

are only 37 mentions, compared to 73 in the 14th, and 98 in the 13th edition. Not only had coverage declined but also the concentration of the coverage intensified. These 37 total mentions are spread in only four different sections of the textbook: two chapters, the preface, and the glossary. Since the preface and glossary are relatively trivial sections not read by many students, there are essentially two different sections; one is the “Introduction” chapter and second is the “Strategies of Economic Development”.

Towards the end of the “Introduction” chapter, in the first paragraph of “Economists who changed the course of history,” the authors give a brief story of Karl Marx:

In the decades that followed, history seemed to confirm some of Marx’s predictions. Economic panics and deep depressions in the 1890s and 1930s led intellectuals of the twentieth century to question the viability of private-enterprise capitalism. Socialists began to apply their model in the Soviet Union in 1917, and at the peak, almost one-third of the world was ruled by Marxian doctrines. Today, of course, the number of countries labeling themselves as Marxian has shrunk dramatically. Marx was wrong about many things—notably the superiority of socialism as an economic system—but that does not diminish his stature as an important economist. (p. 7)

So, if history “seemed” to confirm Marxist hypotheses for certain decades then in the following decades it might confirm them again. Karl Marx never considered that capitalism would invariably and constantly be in depression. Of course, in some phases, it is going to expand, and some decades, it will stagnate. He formulated a cyclical theory of economy, and argued that these cycles are inherent to the system. If during the 1930s, capitalist countries were in depression and, during the 1990s, capitalism was expanding (despite several smaller scale recessions in between), this does not mean that Marx was right in the 1930s, and wrong in the 1990s. Capitalism is a dynamic mode of production and so is Karl Marx’s theory. This presentation of Marxism misleads students to think

that Marx is right whenever there is a recession and wrong when there is a boom. An interesting question would be whether Nordhaus and Samuelson would say “Marx was right” in their 2010 19th edition, published almost three years after the global financial meltdown.

The misconception of Marxism as a mode of production perseveres. Authors state, “The number of countries labeling themselves as Marxian states has shrunk dramatically.” What is a Marxian state? A state agreeing with the theory that crises are inherent to capitalism, and that there is class conflict? Maybe yes, but it does not make sense. Is there any state which officially, or unofficially, declared itself as Marxian? Marxism as a state ideology is possible but not very meaningful; even so, the disintegration of U.S.S.R. was not due to a specific failure of Marxism. In that sense, none of the countries the authors had considered were Marxian, but they were officially socialist; like, the Union of Soviet Socialist Republics, not the Union of Soviet Marxian Republics. Criticizing Marxism and socialism are two different issues. It is like comparing apples to oranges. Nordhaus and Samuelson have frequently, and repeatedly, been mixing these together. Unfortunately, students regard these university textbooks as gospel, as Samuelson agrees, thinking that they deliver the ultimate scientific knowledge. Hardcoding these concepts with such garbled explanations misguides the students.

From page 7 to 714, there is not a single mention of Karl Marx, Marxism, Marxist(s), or Marxian(s). When we come to page 714 we see that the “Winds of Change” chapter had been set aside and some parts of it are squeezed into a new chapter called “Strategies of Economic Development.” The main objective of this chapter is to show how great the markets are for development and that developing countries should

stay away from socialism. Even this hypothesis is a highly debatable one. Ha-Joon Chang (2007), in *The Bad Samaritans*, shows that neoliberal macroeconomic policies, free markets, and free trade actually hurt underdeveloped countries while benefiting the advanced economies. In essence, some sort of socialist, social democratic, central planning, and protectionist policies fare better than free market and free trade in terms of economic development. However, this chapter solely highlights free markets and property rights, vilifying planning and socialism. In that regard, the new section “The Failed Model: Soviet Communism” speaks for itself. Another interesting question is whether the authors would consider Iceland (or Argentina, Greece, etc.) as “The Failed Model: Icelandic Capitalism” in their 2010 edition. I expect that there would be a positive bias in the Samuelson’s treatment of similar events. The failures of capitalism would be, at best, underplayed and presented with euphemism blaming politicians and populist policies.

Under “The Failed Model: Soviet Communism,” there is a subsection titled “Marxism: The Roots of Communism.” As discussed before, there is certainly interaction between socialism and Marxism; however, considering Marxism as the root of communism is an exaggeration. The idea of socialism or communism dates back to Thomas More. In this part, Nordhaus asserts that:

The economic interpretation of history is one of Marx’s lasting contributions to Western thought. Marx argued that economic interests lie behind and determine our values. Why do business executives vote for conservative candidates, while labor leaders support those who advocate raising the minimum wage or increasing unemployment benefits? The reason, Marx held, is that people’s beliefs and ideologies reflect the material interests of their social and economic class. In fact, Marx’s approach is hardly foreign to mainstream economics. It generalizes Adam Smith’s analysis of self-interest from the dollar votes of the marketplace to the ballot votes of elections and the bullet votes of barricades. (p. 715)

Here is an important implication one can derive from this excerpt. Marx is appreciated insofar his thoughts overlap with the mainstream; or else, he is marginalized. Mainstream economic thought regards free markets and capitalism as a coherent and harmonious system; in this regard, the class conflict approach is the exact opposite of this view. This results in the marginalization of Marxism. For instance, earlier, Samuelson had presented this as “the so-called class struggle” with ironic quotation marks. The value of Marxism is determined to the extent it overlaps with the assumptions, hypotheses, and inferences of mainstream economics. Basically, Marxism is defined over the neoclassical economics.

The last time we see Marxism is in the glossary of terms, at the very end of the book, as one entry. It is worthwhile to see how Marxism is presented in a couple of sentences in their wordbook:

Marxism. The set of, political, and economic doctrines developed by Karl Marx in the nineteenth century. As an economic theory, Marxism predicted that capitalism would collapse as a result of its own internal contradictions, especially its tendency to exploit the working classes. The conviction that workers would inevitably be oppressed under capitalism was based on the iron law of wages, which holds that wages would decline to subsistence levels. (p. 756)

This is a very shallow and biased entry, not touching on the foundations of Marxism. Without mentioning the very basic concepts of class conflict and class struggle, the authors jump into predictions. After teaching Marxism as a fiasco, throughout the text, the reader would naturally think that “predictions have gone wrong, and if this is what Marxism is all about then there is nothing to it.” Iron law of wages was considered to be an exaggeration and an unlikely outcome by Nordhaus and Samuelson. Lastly, Marx argued that there is direct exploitation of labor, not a “tendency to exploit.” The authors have also misquoted this concept.

Let us compare this glossary entry to that of Dictionary.com, which is the world's leading dictionary:

The system of economic and political thought developed by Karl Marx, along with Friedrich Engels, especially the doctrine that the state throughout history has been a device for the exploitation of the masses by a dominant class, that class struggle has been the main agency of historical change, and that the capitalist system, containing from the first the seeds of its own decay, will inevitably, after the period of the dictatorship of the proletariat, be superseded by a socialist order and a classless society. (Marxism, 2017)

For a paragraph-long entry, this gives a more coherent understanding of Marxism than Samuelson and Nordhaus, without any visible literal or rhetorical orientation.

Overall, even though the coverage is very much restricted, the ideological bias manifests itself even more explicitly. Marxism passes in only four sections; two of them are in-text chapters, one is the preface and the other is the glossary. One of the two chapters is the second to the last chapter. Which means many professors do not even teach it. And when they do, the presentation is based on showing how Soviet Russia and Marxism were fiascos. The preface and the glossary sections are rarely read, anyway. And when they are read, the interpretation of Marxism would be confusing, misleading, and biased. All in all, in this edition, Marxism is either almost not apparent, or shows up with an ideological bias.

4.4.2 16th Edition, 1998

With the modifications made in the 15th edition, the definitive volume of coverage and tone of language had been reached. There are only marginal differences in terms of the treatment of Marxism and related topics from the 15th to 16th edition, also to the

forthcoming ones. Nevertheless, there are a couple of points worth highlighting.

As 1998 was the 50th year of the textbook, Samuelson wrote another memorial before the preface, titled “A Golden Birthday.” Samuelson moderated the ideological bias in the 1973, 1976, and 1980 editions giving a somewhat fairer coverage and treatment of Marxism. With the involvement of Nordhaus, the bias and the disparaging language have been brought back in an exacerbating way. In this section, Samuelson says:

The tragic comedies of Russian and Chinese communistic organization of production and distribution have robbed three generations of the potential fruits of rising standards of material life. At the same time, the completely free market mechanism has not been able to bring all of humankind measurable near-equality of opportunity and outcome.

Because of the “the poor we have always with us,” the modern democratic state has evolved everywhere into a “mixed economy”—neither pure laissez-faire market mechanism nor Robin Hood utopia. (p. xxiv)

Samuelson, from the beginning, had been favoring a mixed-economy model; in other words, free-market capitalism with a little government intervention, but not too much. In the above excerpt, using polarization, he is repeating this mixed-economy vision, with a biased language. He is stating that the two extremes did not work well. However, while explaining that, he does not approach the two extremes equally. On one hand, he describes the Russian and Chinese models as “tragic comedies,” stressing the failure of these models with a strong title. But on the other side, he just says “the completely free market mechanism has not been able to bring all of humankind measurable near-equality of opportunity and outcome,” without putting any obvious negative emphasis. Similarly, in the second paragraph, he refers to socialism as “Robin hood utopia”; however, he does not attach any label with negative connotations to pure laissez-faire market mechanism. Also, in the first paragraph, Samuelson, almost implying the conservative American rhetoric, envisages socialism as a robbery, with

shared but lower material standards. But he does not consider capitalism as a robber of equality. This shows that he regards rising material standards of the few as the default option and that equality is, at best, a secondary concern. One could have worded this from the other way around saying that capitalism has been robbing people at the bottom of the ladder, and that socialism has not been able to bring measurable near-rising standards of living, thereby explaining the same phenomena, using different wording. The authors, one more time, have chosen the style and position directly favoring the ideology of capitalism.

In the earlier editions, there had been references to Karl Marx in the very first chapter. It was to introduce the “great thinker” and his ideas. In the previous edition, although the wording of the text was uncomplimentary, Karl Marx was advertised as an example of economists who changed the course of the history. In this edition, that section had been moved to page 550, to the chapter “The Challenge of Economic Development.” Before that chapter, the first mention shows up in the “Efficiency vs. Equality” chapter:

A third, and the most far-reaching, ideal is equality of economic outcome. In this idealistic dream, people would have the consumption whether they were smart or dull, eager or lazy, lucky or unfortunate. Wages would be the same for doctor and nurse, lawyer and secretary. “From each according to his abilities, to each according to his needs” was Karl Marx’s formulation of this philosophy. (p. 353)

The authors have described perfect equality as an idealistic dream. This interpretation teaches students that income equality is something difficult to realize, almost like a dream; so, accept the reality of capitalism. However, the authors have never labeled perfect free markets as a dream, because, it is a good dream for Nordhaus, whereas perfect equality is a terrible one. They also contribute to the myth that “doctors

and nurses would get the same wages.” This cliché is an easy way to promote negative propaganda against socialism. By contrasting skilled and unskilled labor, the liberal ideology implies that it would be unfair to the skilled worker to be paid as much as an unskilled worker. They support this implication with “From each according to his abilities, to each according to his needs.” However, this statement does not support or confirm the idealistic dream of perfect equality, as the authors have put it. If a certain worker’s material, nutritional, and educational needs are more than another worker’s, than he or she would be paid more than the other who needs fewer wages to reproduce him or herself. In the strict socialist sense, perfect equality of wages is not the ideal distribution, indeed. The authors, again, muddy the water with confusing and irrelevant connections.

The second time Karl Marx shows up within the body of the textbook, as mentioned earlier, is in the chapter of “The Challenge of Economic Development” (p. 550). This is where most of the references to Marx are found. The call-out box titled “Economists who changed the course of history,” which was in the introduction chapter of the 16th edition was moved here and renamed “Karl Marx: Economist as revolutionary.” Clearly, in a mainstream textbook referring to Karl Marx as a revolutionary attaches some negative connotation compared to referring him as an economist who changed the course of history. The section “Prophecies” (of Karl Marx) had also been renamed as “Baleful Prophecies” in this edition. All these small wording modifications redound to the existing rhetoric and ideological bias. Almost all the other references in this chapter are identical to that of previous edition, with minor changes.

Overall, Karl Marx first shows up in Samuelson’s memorial section, in an

unimportant context; second, in the preface, while authors promise to cover all great economists; third, in “Efficiency vs. Equality” chapter, in a confusing manner; fourth, in “The Challenge of Economic Development” chapter, mostly with falsification attempts; and, lastly, in the glossary. The majority of the students would not even read the prefaces; and even if they do, in this case, Karl Marx is not mentioned in a relevant and informative context. The “Efficiency vs. Equality” and “The Challenge of Economic Development” chapters are not really at the heart of mainstream economics; many professors will skip these chapters. Similarly, a glossary is a glossary. Basically, a student studying this textbook might not come across the name of Karl Marx, ever. And when he or she ever does, it is either in an irrelevant context or with a negative display.

4.4.3 17th, 18th, and 19th Editions

These editions, published in 2001, 2005, and 2010, respectively, are virtually unchanged from 16th edition. From the 16th to the 17th edition, there is only one less mention of Karl Marx. In the 16th edition, in which there were 34 mentions of Karl Marx. Samuelson mentioned Karl Marx, out of a relevant context, in his 50th anniversary memorial. In the 17th edition, since the memorial is not there, there is one less mention, for a total of 33. All the remaining mentions are word-by-word intact. In the 18th edition, eliminating one glossary term, the number of mentions decreased by one as well, to 32. There is one additional mention in the personal proclamation of Samuelson, before the preface of the 19th edition:

The centrism we describe is not a prescription that is intended to persuade readers away from their beliefs. We are analysts and not cult prescribers. It is not ideology that breed centrism as our theme. We sift facts and theories to determine the consequences of Hayek-Friedman libertarianism

or Marx-Lenin bureaucratic communism. All readers are free to make up their own minds about best ethics and value judgments. (p. xvi)

Why would an objective scientist feel the need to defend his position, particularly? It is hard to think Einstein ever needed to defend his work in such manner. This apology, indeed, implies that there have been serious accusations and discomfort regarding the ideological bias in his textbook. He says that all readers are free to make up their minds; however, after presenting a very narrow spectrum of ideas, disparaging all alternative economists and ideas, and using strong literal and rhetorical devices for argumentation to promote neoliberalism and neoclassical economics, it is hard to be convinced that freshman students will freely be making up their minds.

Even though the dissolution of the Soviet Union happened only a few months before the printing of 14th edition, the authors reflected on this important political event in their textbook. It has been three years (enough time to make a full revision of a textbook) since the beginning of the global financial meltdown, but we see only a very weak and half-hearted treatment of the crisis in the new 19th edition. To give a comparison, for instance, Krugman and Wells (2012), in their textbook, have started a dedicated chapter titled “Crises and Consequences,” putting a great emphasis on the 2007–2009 recession. Samuelson and Nordhaus acknowledge the crises but they have not made any serious attempt to detail its causes and consequences as much as they had worked on debunking Marxism. Rather, they bring up the financial recession, here and there, in passing with a couple of paragraphs in a couple of relevant chapters. Their main argument is that such “shocks” to the economy can be alleviated by active government and central bank policies.

In the preface of 19th edition:

We should remember, however, that the financial crises of 2007-2009 came after more than a half-century of spectacular increases in the living standards of the most of the world, particularly those living in the affluent countries of North America, Western Europe, and East Asia. (p. xviii)

This is, at best, an apology and understatement of the global recession, which is comparable to the Great Depression. Instead of focusing on its determinants and consequences, the authors provide an excuse for capitalism, stating that for more than a half-century, there had not been any such crises and living standards were improving up until the recession. The Soviet model lasted for more than a half-century, as well. However, the authors never understated its dissolution with such supportive arguments; instead, they glorified it as a victory of capitalism. Another such apology is at the end of “Open-Economy Macroeconomics” chapter:

It is true that market economies occasionally suffer from inflation and recession. Moreover, in the most recent downturn in 2007-2009, unemployment rose sharply and many financial giants teetered on the edge of bankruptcy. Nonetheless, if we step back, an impartial jury of historians would surely rate the last half-century as one of the unparalleled success for the countries of North America and Western Europe. (p. 583)

As the authors mention the recession, they immediately link the topic to the “unparalleled” success of earlier years, to compensate for the negative connotation. If we step back, the Soviet Russia grew to be a superpower under socialism. From a backward tsarist regime, they became the first nation in space. Starting from a lower level than most Western European countries, they grew at faster rates, catching up and overtaking many of them. Not to mention the humanistic acquisitions, equality, better health, education and other social improvements. However, all these developments are not brought up as successes of socialism.

After stating that 2007–2009 recession was a deep and long one, authors continue:

Sometimes, macroeconomic failures raise life-and-death questions for

countries and even for ideologies. The communist leaders of the former Soviet Union proclaimed that they would overtake the West economically. History proved that to be a hollow promise, as Russia, a country teeming with natural resources and military might, was unable to produce adequate butter for its citizens along with the guns for its imperial armies. Eventually, macroeconomic failures brought down the communist regimes of the Soviet Union and Eastern Europe and convinced people of the economic superiority of private markets as the best approach to encouraging rapid economic growth. (p. 368)

This explanation is not only irrelevant for the sake of the 2007–2009 global recession but also is false. All of the Soviet bloc countries, except Poland, have been doing worse in terms of economic growth and many other socioeconomic aspects (Bowles, 2009). Most Eastern European countries experienced severe economic collapses during the 1990s. Suicide rates have increased; income and wealth inequality have widened; unemployment and homelessness have become prevalent. Russia, achieved the real output level of late Soviet times only around 2011. Also, as mentioned earlier, many opinion polls show that in some of these countries, the majority of the people are not convinced of the superiority of the markets, on the contrary, they want socialism back. Lastly, the authors state that macroeconomic failures sometimes raise important questions for countries and for ideologies; however, the most recent global recession with developed economies declaring bankruptcy does not seem to raise any questions for Samuelson and Nordhaus.

Nowhere in this edition do we see any discussion of bankrupt countries like Iceland as a failure of capitalism. While the authors aggravate any issue with central planning and socialism, they tend to understate the importance, relevance, and existence of systemic failures of capitalism. This double-standard normalizes and trivializes depressions and recessions in students' minds.

4.4.4 Conclusion

The 1990s was the decade of prosperity for the United States and many other advanced economies. Stock markets were rising. International trade was expanding and capital mobility was speeding up. The North American Free Trade Agreement (NAFTA) was signed by the United States, Canada, and Mexico. With the dissolution of the Soviet Union, socialism was not considered a “threat” anymore. Fukuyama’s term “the end of history” has gained global recognition. Conservative parties have been coming to power all around the world. Recessions and financial crises were prevalent only in less developed economies, not in advanced ones. This has been the ultimate line of defense for liberal ideology; that is, if the developing and underdeveloped countries, following the recipes of the IMF and World Bank, improve their free market institutions and complete their financializations, then they would not experience crises anymore.

The 2000s started with small-scale recessions. Central banks responded by lowering the interest rates dramatically, which, in turn, triggered asset-price bubbles. The accumulated crisis potential burst in 2007. The financial meltdown in the United States quickly spread all over the world. Large corporations and even countries went bankrupt. The Eurozone was on the verge of collapse. This was a big “shock” to mainstream economics, since, in the neoclassical theory, there is no room for systemic collapses. *Capitalsales* tripled. Liberal economists and neoclassical economics became targets in the media and in universities. Curiosity and interest for nonmainstream economics increased. The postautistic Economics Movement, established in 2000, gained significant support.

We see that the last five editions (15, 16, 17, 18, and 19) are virtually

indistinguishable from each other in terms of both the volume of coverage and the treatment of Marxism and related concepts. The disintegration of the Soviet Russia, which was partially reflected in the 14th edition, had served as a point of support to reduce the coverage of Marxism and solidify the ideological bias. In the last edition, right after the great recession, the double-standard in presenting the failures of socialism and capitalism has become very clear. Authors tend to trivialize the downsides of capitalism with a smoother wording, whereas they disparage other economic perspectives and events. Although it has been about two decades, authors, here and there, still criticize the disintegration of the Soviet Union, at times in irrelevant contexts. All in all, everything negative about Marxism and socialism is covered with highly depreciating language and great coverage, whereas everything negative about free market capitalism is covered with a clear euphemistic language.

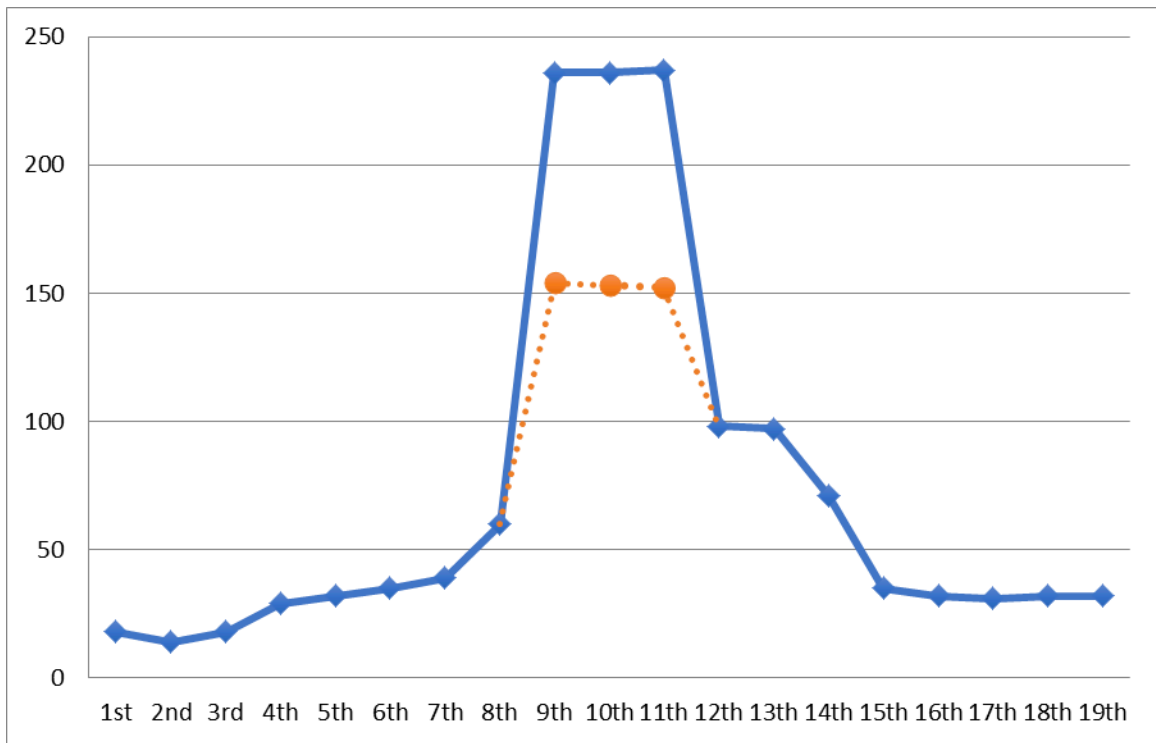


Figure 4.1 Mention counts of Marx, Marxism, Marxian(s), and Marxist(s)

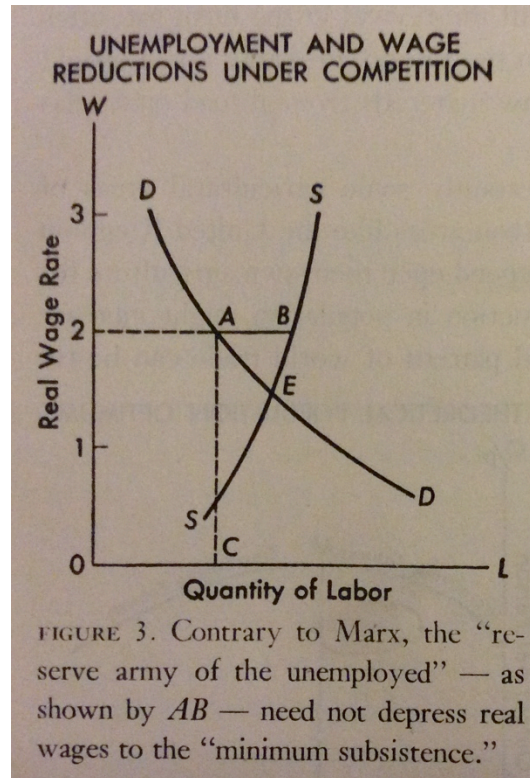


Figure 4.2 Samuelson's labor market example in the 2nd edition

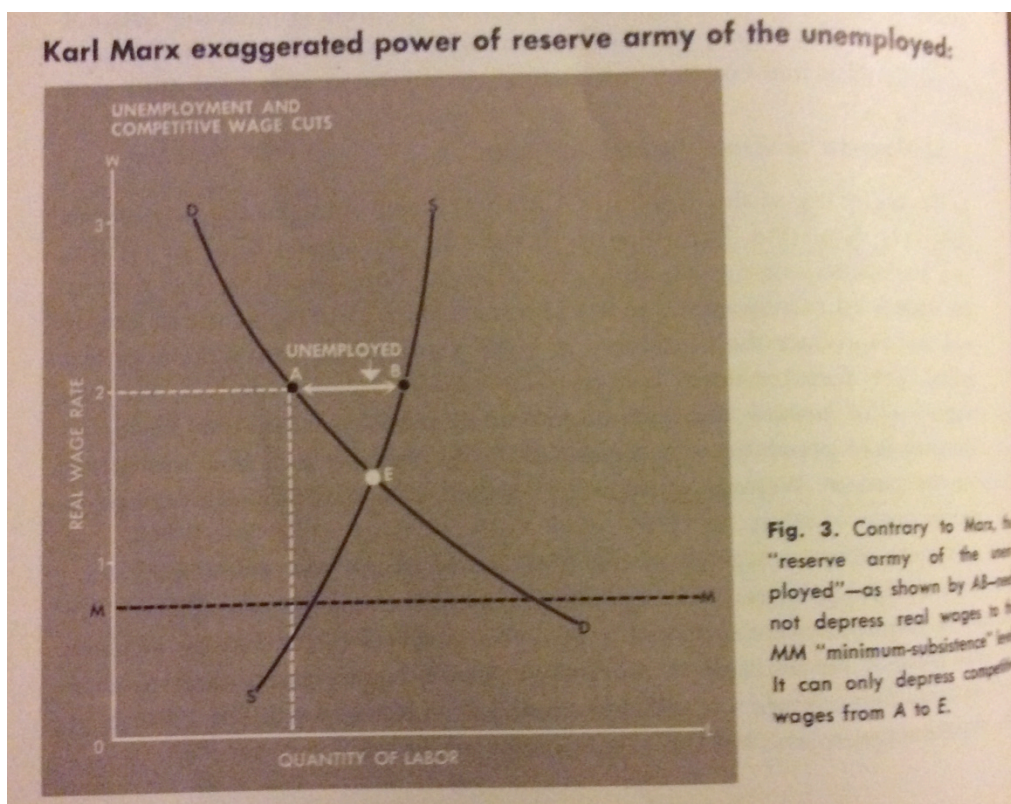


Figure 4.3 Samuelson's labor market example in the 4th edition

Table 4.1 Mention counts by the year and the edition

Edition	Year	Count
1	1948	18
2	1951	14
3	1955	18
4	1958	29
5	1961	32
6	1964	35
7	1967	39
8	1970	60
9	1973	236
10	1976	236
11	1980	237
12	1985	99
13	1989	98
14	1992	73
15	1995	37
16	1998	34
17	2001	33
18	2005	32
19	2010	33

Table 4.2 Examples of discursive structures

Discursive structures	Examples
Identifications	Marxists are bad Neoclassicists are good
Polarizations	Socialism versus capitalism Extreme left-wing movement
Activities	Capitalism must perform superlatively
Pronouns	Us versus them, those people
Positive self-descriptions	Free, scientific, democratic, liberty
Negative other-descriptions	Totalitarian, dictatorial, fictional, utopian
Interests	Capitalism must perform superlatively

CHAPTER 5

CONCLUSION

The enticing promises of capitalism have not been kept. Poor countries cannot catch up with rich ones. Poor people cannot keep with Bill Gates. On the contrary, the gaps between the rich and poor have become wider and wider. Oxfam reported that “just 8 men own the same wealth as half the world” (Hardoon, 2017). Widening income and wealth inequality, high and persistent unemployment, systemic crises, environmental degradation, failing economies have all been undermining the capitalist system. People have been marching in the streets, burning cars, and smashing windows of banks while protesting against capitalism. Ideology is used to legitimize this sort of unpleasant outcome of the system. Educational institutions discourage dissent (Zinn, 2005). Liberal ideology privatizes the social costs onto the individual. Some level of unemployment is said to be “natural.” Too bad if you are one of those people who are “naturally” unemployed. You could, as well, have been Bill Gates if you had put in the sufficient effort. One is free to choose to be Donald Trump or to be a pauper. Many American people blame themselves for being poor, unemployed, or homeless. This shows how ideology has intimidated and indoctrinated the people.

Samuelson states, “I don’t care who writes a nation’s laws—or craft its advanced treaties—if I can write its economics textbooks,” admitting the fact that textbooks play an

important role in the indoctrination of populations. A few top titles dominate the entire market. As I have discussed, these few top titles are not any different from each other and from Samuelson's classic. Economics, today, is equal to neoclassical economics, which is totally intolerant to other schools of thought. Textbook presentations and the teaching of introductory economics is uninteresting, and not very useful. Some concerned students at Harvard University, expressing their discontent with the inherent bias in economics teaching, walked out of Greg Mankiw's introductory economics class (Concerned Students of Economics 10, 2011). One month later, in the *New York Times*, Mankiw gave a half-hearted response, still defending that economics is not ideology-laden (2011). This shows how steadfast mainstream economics has become.

Unlike Mankiw and many other mainstream economists, Heilbroner is convinced and convincing about the ideological content of economics. He argues that academics are very careful about their language in writing (1988, 1996, 2013). Power relations and historical perspective are completely ruled out of economic textbooks. Linder, with his two-volume *Anti-Samuelson*, has harshly criticized Samuelson's textbook topic by topic (1977). Klammer has also drawn attention on the importance of textbooks, Samuelson's *Economics* being the usual suspect (1990). Following McCloskey's rhetorical approach, he argues that the ideological content is implicit; one needs to tease it out in the text. In that regard, only critical reading of the texts is essential in revealing the ideological biases. Varoufakis, decently, asserts that "on every glossy page, behind each pristine diagram, lies some fragile, and often dark, idea which is kept well hidden from the beginner's eye" (2002).

This dissertation, based upon the works of Klammer, Linder, and McCloskey,

attempts to present a complete case for the ideological bias in introductory economics textbooks. There are two main conclusions in this research. First, the textbook presentation of economics, at the introductory level, is ideologically biased. Overall, Marxist school of thought is vilified whereas the free market capitalism is glorified. Second, Samuelson's *Economics*, as the consensus textbook, has been very responsive to the changing political atmosphere. One of the contributions of this work is to show that there are four distinct time periods with different levels of ideological bias. In the 1948–1970 period, which is characterized by big government, heydays of Keynesianism, the welfare state, and high economic growth, we see that there is visible increasing bias against nonmainstream schools. In the 1970s, the Soviet Union closed the gap with the United States. New Left and heterodox economics was on the rise. New textbooks were challenging Samuelson's market power. As a result, in the 1973-1980 period, we see that not only the volume of coverage of leftist topics dramatically increased but also there were some corrections in the ideological distortions. The Washington Consensus has turned the tides, though. Neoliberalism has become the dominant doctrine since the 1980s. With the involvement of William Nordhaus in 1985, this shift has been reflected in the textbook. In a few editions, the partially corrected ideological bias has become even worse than it ever was. The volume of coverage has become very slim. As expected, the dissolution of Soviet Union marked the end of all coverage. From 1995 to 2010, not a single favorable word has been made for Marxism at all. Their strategic discourse has become more and more contemptuous in Samuelson's textbooks.

Throughout the 19 editions, Samuelson identifies Marxists as “bad” and neoclassical economists as “good.” He frequently uses the pronoun structure of “us

versus them;” where “us” refers to Americans, neoclassicists, free market economists and “them” refers to Marxists and socialists. Terms like freedom, research, science, and democracy are used for positive self-descriptions; totalitarian, dictatorial, fictional, utopian, and so forth, are used for negative other-descriptions. Samuelson clearly takes a political position saying that capitalism must perform superlatively, which indicates his interests are located in the status quo. Also, until the 12th edition, he polarizes socialism and capitalism by negatively describing socialism as fascism and positively describing capitalism as democracy. These discursive structures are employed to enhance credibility and to alienate the nonmainstream.

Samuelson, and the rest of the mainstream, sets the bar high regarding the scientific standards. When it comes to practice, though, like Mark Blaug (1992) and Deirdre McCloskey (1998), he does not practice what he preaches. In the 9th through 11th editions, Samuelson makes corrections and improvements on his treatment of Marxism. However; on one side, there are chapters and sections giving a neutral treatment of Marxism, yet on the other side, the established ideological bias remains in the rest of the book. Furthermore, Samuelson, starting with the 1st edition, makes students discuss the statement “I’d rather starve in free America than live off the fat of the land under totalitarian communism.” This, as well, is a contradictory position. Samuelson lauds American capitalism at every turn while maligning Soviet socialism. However, asking students to discuss free America versus fat Soviet Russia is merely inconsistent. So, not only at the scientific making of neoclassical economics but also at the rhetorical level. Marx is both an unsound fellow and a learned man. Socialism is both inferior and productive. These converse positions take place at the same time in the texts.

Not only the concerned students of Mankiw but also prominent economists like Steve Keen, Geoffrey Hodgson, Uskali Maki, and Deirdre McCloskey have all been calling for pluralism in economics. Post-Keynesian, ecological, institutional, behavioral, Marxist, feminist economics have been marginalized. Beyond the methodological shortcomings, serious reforms in curricula and textbooks are necessary for more democratic education. This work was an attempt to make a case for the inherent ideological bias in the economics textbooks. Admittedly, it is not a proof of the ideology; rather, a discussion. I believe that further research should be done on the modern copycats of Samuelson's textbook. A cross-sectional analysis of these best-selling textbooks would contribute to the discussion. Alternatively, the rhetoric on specific political policies, such as privatization or unionization, could be inspected. From the Kuhnian perspective, it is impossible to see a structural change in the textbooks without a paradigm shift in economic science. On the other hand, if the Lakatosian framework is a better fit in economics, then we can have multiple research programs with multiple textbooks and courses. The problem with this is that the system hampers multiplicity of research programs and curricula via impact factors of journals, and selection criteria in job markets. Even though some students want to get a heterodox training, considering the competitive job market, they tend towards the mainstream; not necessarily because they care about neoclassical economics, per se. Currently, there exist more objective and pluralist textbooks, such as *Macroeconomics in Context* (2013) and *Microeconomics in Context* (2009) by Goodwin et al. However, instructors hesitate adopting these textbooks because they tend to adopt the ones their professors have used, which creates a deadlock. All in all, it seems the struggle for democratic education will continue in the near future.

REFERENCES

- Alchian, A. A., & Allen, W. R. (1972). *University economics*. Belmont, CA: Wadsworth.
- Alston, R. M., Kearn, J. R., & Vaughan, M. B. (1992). Is there a consensus among economists in the 1990's? *The American Economic Review*, 82(2), 203–209.
- Aslanbeigui, N., & Naples, M. I. (1996). Positivism versus paradigms: The epistemological underpinnings of economic debate in introductory textbooks. In N. Aslanbeigui & M. I. Naples (Eds.), *Rethinking economic principles: Critical essays on introductory textbooks*, (pp. 11–27). Chicago, IL: Irwin.
- Avsar, R. B. (2011). Mainstream economic rhetoric, ideology and institutions. *Journal of Economic Issues*, 45(1), 137–158. doi: 10.2753/JEI0021-3624450108
- Backhouse, R. E. (2010). *The puzzle of modern economics: Science or ideology?* Cambridge, U.K.: Cambridge University Press.
- Bailey, C. (1992). Enterprise and liberal education: Some reservations. *Journal of Philosophy of Education*, 26(1), 99–106. doi: 10.1111/j.1467-9752.1992.tb00268.x
- Banuazizi, A., & Movahedi, S. (1975). Interpersonal dynamics in a simulated prison: A methodological analysis. *American Psychologist*, 30(2), 152–160. doi: 10.1037/h0076835
- Baumol, W. J., & Blinder, A. S. (1979). *Economics: Principles and policy*. New York: Harcourt Brace Jovanovich.
- Bicchieri, C. (1988). Should a scientist abstain from metaphor? In A. Klammer, D. N. McCloskey, & R. M. Solow (Eds.), *The consequences of economic rhetoric* (pp. 100–116). Cambridge, U.K.: Cambridge University Press.
- Bird, A. (2006). *Philosophy of science*. London, U.K.: Routledge.
- Black sheep. (n.d.) Retrieved from [http://www.merriam-webster.com/dictionary/black sheep](http://www.merriam-webster.com/dictionary/black%20sheep)
- Blaug, M. *The methodology of economics: Or, how economists explain*. (2nd ed.). Cambridge, U.K.: Cambridge University Press, 1992.
- Bowles, S. (1981). Technical change and the profit rate: a simple proof of the Okishio

- theorem. *Cambridge Journal of Economics*, 5(2), 183–186.
- Bowles, S. (2006). *Microeconomics: Behavior, institutions, and evolution*. Princeton, N.J.: Princeton University Press.
- Bowles, S., Edwards, R., & Roosevelt, F. (2005). (3rd ed.). *Understanding capitalism: Competition, command, and change*. New York: Oxford University Press.
- Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. New York: Basic Books.
- Byrns, R. T., & Stone, G. W. (1992). *Economics* (5th ed.). New York: Harper Collins
- Cairnes, J. E. (1965). *The character and logical method of political economy*. London, U.K.: Cass.
- Caldwell, B. J. (1991). The methodology of scientific research programmes in economics: Criticisms and conjectures. In G.K. Shaw (Ed.), *Economics, culture, and education: Essays in honour of Mark Blaug* (pp. 95–107). Brookfield, VT: E. Elgar.
- Carvellas, J., Kessel, H., & Ramazani, R. (1996). Counting pages: The evolution of the economics principles text. In N. Aslanbeigui & M. Naples (Eds.), *Rethinking Economic Principles* (pp. 225–242). Chicago, IL: Irwin.
- Cameron, K. S., Ireland, R. D., Lussier, R. N., New, J. R., & Robbins, S. P. (2003). Management textbooks as propaganda. *Journal of Management Education*, 27(6), 711–729. doi: <https://doi.org/10.1177/1052562903257942>
- Chang, H. (2008). *Bad Samaritans: The myth of free trade and the secret history of capitalism*. New York: Bloomsbury Press.
- Cherry, R. (1985). Textbook treatments of minimum-wage legislation. *The Review of Black Political Economy*, 13(4), 25–38. doi: 10.1007/BF02899888
- Chomsky, N. (1975). Toward a humanistic conception of education. In W. Feinberg, & H. Rosemont (Eds.), *Work, technology, and education: Dissenting essays in the intellectual foundations of American education* (p. 219). Urbana, IL: University of Illinois Press.
- Clarke, P., & Mearman, A. (2003). Why Marxist economics should be taught but probably won't be! *Capital & Class*, 27(1), 55–80. doi: 10.1177/030981680307900105
- Coats, A. W. (1969). Is there a “structure of scientific revolutions” in economics? *Kyklos*, 22(2), 289–296. doi: 10.1111/j.1467-6435.1969.tb02533.x
- Colander, D. (2010). *The evolution of US economics textbooks*. No. 1037. Middlebury

- College, Department of Economics.
- Colander, D., & Landreth, H. Political influence on the textbook Keynesian revolution: God, man and Lorie Tarshis at Yale. In O. F. Hamouda, & B. B. Price (Eds.), *Keynesianism and the Keynesian revolution in America: a memorial volume in honour of Lorie Tarshis Edward Elgar* (pp. 59–72). Cheltenham, U.K.: Edward Elgar.
- Concerned Students of Economics 10. (2011, November 2). An open letter to Greg Mankiw. Retrieved from <http://harvardpolitics.com/harvard/an-open-letter-to-greg-mankiw/>
- Critical Discourse Analysis. (2011). In P. C. Hogan (Ed.), *The Cambridge encyclopedia of the language sciences*. Cambridge, U.K.: Cambridge University Press
- Davies, L. (n.d.). "Competition." *Competition*. Henry George Institute, Web. 30 Dec. 2015.
- De Balzac, H. (2008). *The unknown masterpiece*. Rockville, MD: Wildside Press.
- De Vroey, M. (1975). The transition from classical to neoclassical economics: a scientific revolution. *Journal of Economic Issues*, 9(3), 415–439. doi: 10.1080/00213624.1975.11503296
- Dow, S. C. (1997). Mainstream economic methodology. *Cambridge Journal of Economics*, 21(1), 73–93. doi: 10.1093/oxfordjournals.cje.a013660
- Dragomir, E. (2009). Explaining communist nostalgia in Romania: Some empirical evidence. *Valahian Journal of Historical Studies*, 12, 7–28.
- Duménil, G., & Lévy, D. (2004). The real and financial components of profitability (United States, 1952–2000). *Review of Radical Political Economics*, 36(1), 82–110. doi: <https://doi.org/10.1177/0486613403261127>
- Elzinga, K. G. (1992). The eleven principles of economics. *Southern Economic Journal*, 58(4), 861–879.
- Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. London, U.K.: Routledge.
- Feyerabend, P. (1980). How to defend society against science. In E. D. Klemke (Ed.), *Introductory readings in the philosophy of science* (pp. 54–65). Buffalo, NY: Prometheus Books.
- Feyerabend, P. (1993). *Against method*. London, U.K.: Verso.
- Fukuyama, F. (2006). *The end of history and the last man*. New York: Free Press.
- Galbraith, J. K. (1997). *The good society: The humane agenda*. Boston, MA: Houghton

- Mifflin Co.
- Giraud, Y. B. (2011). The political economy of textbook writing: Paul Samuelson and the making of the first ten editions of economics (1945–1976). *History of Political Economy*, 46(5).
- Goldschmidt, N., & Szmrecsanyi, B. (2007). What do economists talk about? A linguistic analysis of published writing in economic journals. *The American Journal of Economics and Sociology*, 66(2), 335–378. doi: 10.1111/j.1536-7150.2007.00514.x
- Gottesman, A. A., Ramrattan, L., & Szenberg, M. (2005). Samuelson's economics: The continuing legacy. *Quarterly Journal of Austrian Economics*, 8(2), 95–104. doi: 10.1007/s12113-005-1024-3
- Habermas, J. (1978). *Knowledge and human interests*. (2nd ed.). London, U.K.: Heinemann Educational.
- Hardoon, D. (2017). *An economy for the 99%*. Oxfam International. Warwickshire, U.K.: Practical Action Publishing.
- Hausman, D. M. (1989). Economic methodology in a nutshell. *The Journal of Economic Perspectives*, 3(2), 115–127. doi: 10.1257/jep.3.2.115
- Heilbroner, R. L. (1988). Rhetoric and ideology. In A. Klammer, D. N. McCloskey, & R. M. Solow (Eds.), *The Consequences of economic rhetoric* (pp. 38–43). Cambridge, U.K.: Cambridge University Press.
- Heilbroner, R. (1996). The embarrassment of economics. *Challenge*, 39(6), 46–49. doi: 10.1080/05775132.1996.11471942
- Heilbroner, R. (2010). Economics as ideology. In W. J. Samuels (Ed.), *Economics As Discourse: An Analysis of the Language of Economists* (p. 101). Boston, MA: Kluwer Academic.
- Heilbroner, R. L., & Galbraith, J. K. (1987). *The economic problem* (8th ed.). Englewood Cliffs, N.J.: Prentice Hall.
- Hirsch, A., & De Marchi, N. (1990). *Milton Friedman: economics in theory and practice*. Ann Arbor, MI: University of Michigan Press.
- Hobsbawm, E. J. (2011). *On history*. London, U.K.: Abacus.
- Hollis, M., & Nell, E. J. (1975). *Rational economic man: A philosophical critique of neo-classical economics*. London, U.K.: Cambridge University Press.
- Hunt, E. K., & Lautzenheiser, M. (2015). *History of economic thought: A critical perspective*. London, U.K.: Routledge.

- Hunt, E. K., & Sherman, H. J. (1975). *Economics an introduction to traditional and radical views* (2nd ed.). New York: Harper & Row.
- IRES (Institutul Român pentru Evaluare și Strategie) [Romanian Institute for Evaluation and Strategy]. (2010). *Romanii Si Nostalgia Comunismului*. Raport de cercetare [Romania and Nostalgia for Communism. Research report]. Retrieved from http://www.ires.com.ro/uploads/articole/romanii_si_nostalgia_comunismului.pdf
- Jevons, S. W. (1871). *The theory of political economy*. New York: Macmillan.
- King, J. E. (2015). *Advanced introduction to post Keynesian economics*. Northampton, MA: Edward Elgar Publishing.
- Klamer, A. (1987). As if economists and their subjects were rational. In J. S. Nelson, A. Megill, & D. N. McCloskey (Eds.), *The rhetoric of the human sciences* (pp. 163–183). Madison, WI: University of Wisconsin Press.
- Klamer, A. (2010). The textbook presentation of economic discourse. In W. J. Samuels (Ed.), *Economics as discourse: An analysis of the language of economists* (pp. 129–154). Boston, MA: Kluwer Academic.
- Klamer, A. (2002). Making sense of economists: From falsification to rhetoric and beyond. *Journal of Economic Methodology*, 8(1), 69–75. doi: 10.1080/13501780010022857
- Klamer, A., McCloskey, D. N., & Solow, R. M. (1988). *The consequences of economic rhetoric*. Cambridge, U.K.: Cambridge University Press.
- Kuhn, T. S. (2012). *The structure of scientific revolutions* (4th ed.). Chicago: University of Chicago Press.
- Lakatos, I., Worrall, J., & Currie, G. (1980). *The methodology of scientific research programmes: Philosophical papers volume 1*. Cambridge, U.K.: Cambridge University Press.
- Lester, R. A. (1946). Shortcomings of marginal analysis for wage-employment problems. *The American Economic Review*, 36(1), 63–82.
- Lester, R. A. (1947). Marginalism, minimum wages, and labor markets. *The American Economic Review*, 37(1), 135–148.
- Lipsey, R. G., Purvis, D. D. & Steiner, P.O. (1991). *Economics* (7th. ed.). New York: Harper Collins.
- Linder, M. C., & Sensat, J. (1977). *The anti-Samuelson*. New York: Urizen Books.
- Maier, M. (2003). From the classroom to the White House: N. Gregory Mankiw's popular textbook distorts economics. *Dollars & Sense*, 248, 28–31.
- Mäki, U. (1988). How to combine rhetoric and realism in the methodology of

- economics. *Economics and Philosophy*, 4(1), 89–109.
doi: 10.1017/S0266267100000353
- Mäki, U. (1995). Diagnosing McCloskey. *Journal of Economic Literature*, 33(3), 1300–1318.
- Mankiw, N. G. (2006, December 19). Does econ make people conservative? [Blog post]. Retrieved from <http://gregmankiw.blogspot.com/2006/12/does-econ-make-people-conservative.html>.
- Mankiw, N. G. (2011, December 3). Know what you're protesting. *The New York Times*. Retrieved from <http://www.nytimes.com/2011/12/04/business/know-what-youre-protesting-economic-view.html>
- Marx, K. (1981). *Capital: A critique of political economy, volume III* (D. Fernbach, Trans.). New York and London: Penguin Books.
- Marxism. (n.d.) *Dictionary.com Unabridged*. Retrieved April 8, 2017 from Dictionary.com website <http://www.dictionary.com/browse/marxism>
- McCloskey, D. N. (1988). The consequences of rhetoric. In A. Klammer, D. N. McCloskey, & R. M. Solow (Eds.), *The consequences of economic rhetoric* (pp. 286–290). Cambridge, U.K.: Cambridge University Press.
- McCloskey, D. N. (1998). *The rhetoric of economics* (2nd ed.). Madison, WI: University of Wisconsin Press.
- McConnell, C. R., & Brue, S.L. (1990) *Economics: Principles, Problems, and Policies* (11th ed.). New York: McGraw-Hill.
- Mirowski, P. (1992). *More heat than light: Economics as social physics, physics as nature's economics*. Cambridge University Press.
- Mohun, S. (2006). Distributive shares in the US economy, 1964–2001. *Cambridge Journal of Economics*, 30(3), 347–370. doi: 10.1093/cje/bei065
- Moseley, F. (1991). *The falling rate of profit in the postwar United States economy*. New York: St Martin's Press.
- Myrdal, G. (1978). Institutional economics. *Journal of Economic Issues*, 12(4), 771–783. doi: 10.1080/00213624.1978.11503577
- Nelson, R. H. (2004). What is economic theology? *Princeton Seminary Bulletin*, 25(1), 58–79.
- Nelson, R. H. (2014). *Economics as religion: From Samuelson to Chicago and beyond*. University Park, PA: Pennsylvania State University Press, 2014.

- Notzon, F. C, Komarov, Y. M., Ermakov, S. P., Sempos, C. T., Marks, J. S., & Sempos, E. V. (1998). Causes of declining life expectancy in Russia. *Journal of the America Medical Association*, 279(10), 793–800.
- Okishio, N. (1961). Technical change and the rate of profit. *Kobe University Economic Review*, 7, 85–99.
- Phelps, E. S. (1985). *Political economy: An introductory text*. New York: Norton & Co.
- Popkewitz, T. S. (1977). The latent values of the discipline-centered curriculum. *Theory & Research in Social Education*, 5(1), 41–60.
- Popper, K. (2005). *The logic of scientific discovery*. London, U.K.: Routledge.
- Popper, K. (2009a). Science: Conjectures and refutations. In T. McGrew, M. Alspector-Kelly, & F. Allhoff (Eds.), *The philosophy of science: An historical anthology* (p. 471). Malden, MA: Wiley-Blackwell.
- Popper, K. (2009b). *Unended Quest: An Intellectual Autobiography, Karl Popper*. London, U.K.: Routledge.
- Robinson, J. (1962). *Economic philosophy*. London: C. A. Walts and Co.
- Romanish, B. A. (1983). Modern secondary economics textbooks and ideological bias. *Theory and Research in Social Education*, 11(1), 1–24. doi: 10.1080/00933104.1983.10505440
- Roose, K. (2013, May 29). Why Are College Students Flocking to Economics? *New York Magazine*. Retrieved from <http://nymag.com/daily/intelligencer/2013/05/why-are-college-students-flocking-to-economics.html>
- Rosenberg, A. (2011). *Philosophy of science: A contemporary introduction*. Routledge.
- Rubin, I. I., Samardzija, M., & Perlman, F. (1973). *Essays on Marx's theory of value*. Montreal: Black Rose Books.
- Rubinstein, A. (2000). *Economics and language: Five essays*. Cambridge, U. K.: Cambridge University Press.
- Ruffin, R., & Gregory, P. R. (1997). *Principles of economics*. Reading, MA: Addison-Wesley.
- Ryder, W. (2009). System dynamics view of the Phillips machine. In International Conference of the System Dynamics Society & System Dynamics Society (Ed.), *27th International Conference of the System Dynamics Society 2009: Albuquerque, New Mexico, 26-30 July, 2009*. Albany, NY: System Dynamics Society.

- Salk, J., Latour, B., & Woolgar, S. (2013). *Laboratory life: The construction of scientific facts*. Princeton, N.J.: Princeton University Press.
- Samuelson, P. A. (1947). *Foundations of economic analysis*. Cambridge, MA: Harvard University Press.
- Samuelson, P. A. (1948). *Economics: An introductory analysis*. New York: McGraw-Hill.
- Samuelson, P. A. (1951). *Economics* (2nd ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1955). *Economics* (3rd ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1958). *Economics* (4th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1961). *Economics* (5th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1964). *Economics* (6th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1966). A summing up. *The Quarterly Journal of Economics*, 80 (4), 568–583. doi: 10.2307/1882916
- Samuelson, P. A. (1967). *Economics* (7th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1970). *Economics* (8th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1973). *Economics* (9th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Temin, P. (1976). *Economics* (10th ed.). New York: McGraw-Hill.
- Samuelson, P. A. (1980). *Economics* (11th ed.) New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (1985). *Economics* (12th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (1989). *Economics* (13th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (1992). *Economics* (14th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (1995). *Economics* (15th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (1998). *Economics* (16th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (2001). *Economics* (17th ed.). New York: McGraw-Hill.

- Samuelson, P. A., & Nordhaus, W. (2005). *Economics* (18th ed.). New York: McGraw-Hill.
- Samuelson, P. A., & Nordhaus, W. (2010). *Economics* (19th ed.). New York: McGraw-Hill.
- Schumpeter, J. (1994). Science and ideology. In D. M. Hausman (Ed.), *The philosophy of economics: An anthology* (2nd ed.) (pp. 224–238). Cambridge, U. K.: Cambridge University Press.
- Snyder, T. D., & Dillow, S. A. (2013). *Digest of Education Statistics 2013. NCES 2015-011*. Jessup, MD: National Center for Education Statistics.
- Söderbaum, P. (2008). Economics as ideology. In E. Fullbrook (Ed.), *Pluralist economics*. New York: Zed Books.
- Solow, R. M. (1988). "Comments from inside economics." In A. Klammer, D. N. McCloskey, & R. M. Solow (Eds.), *The consequences of economic rhetoric* (pp. 31–37.). Cambridge, U.K.: Cambridge University Press.
- Stanfield, R. (1974). Kuhnian scientific revolutions and the Keynesian revolution. *Journal of Economic Issues*, 8(1), 97–109. doi: 10.1080/00213624.1974.11503164
- Stiglitz, J. E. (1988). On the market for principles of economics textbooks: Innovation and product differentiation. *The Journal of Economic Education*, 19(2), 171–177. doi: 10.2307/1182289
- Tarshis, L. (1947). *The elements of economics: An introduction to the theory of price and employment*. Boston, MA: Houghton Mifflin Company, 1947.
- Van Dijk, T. A. (1995). Ideological discourse analysis. *New Courant*, 4, 135–161.
- Van Dijk, T. A. (2000). Ideology and discourse: A multidisciplinary introduction. *Pompeu Fabra University, Barcelona*.
- Van Dijk, T. A. (2016). Critical discourse studies: A sociocognitive approach. In R. Wodak & M. Meyer (Eds.), *Methods of critical discourse analysis* (3rd ed.) (pp. 62–85). Los Angeles, CA: Sage.
- Varoufakis, Y. (2002). *Foundations of economics: A beginner's companion*. London, U.K.: Routledge.
- Walstad, W. B., Watts, M., and Bosshardt, W. (1998). The principles of economics textbook: history, content, and use. In W. B. Walstad & P. Saunders (Eds.). *Teaching undergraduate economics. A handbook for instructors*. Boston: Irwin McGraw-Hill.

- Watts, M. (1987). Ideology, textbooks, and the teaching of economics. *Theory into Practice*, 26(3), 190–197. doi: 10.1080/00405848709543273
- Webster, A. (1978). Ideology and ‘A’ level economics textbooks. *Economics*, 14(3), 85–87.
- Weinstein, M. M. (2009, December 13). Paul A. Samuelson, Economist, Dies at 94. *The New York Times*. Retrieved from http://www.nytimes.com/2009/12/14/business/economy/14samuelson.html?pagewanted=all&_r=0
- Wilkinson, R. G. (1992). Income distribution and life expectancy. *British Medical Journal*, 304(6820), 165–168. doi: 10.1136/bmj.304.6820.165
- Wodak, R., & Meyer, M. (Eds.). (2016). *Methods of critical discourse analysis* (3rd ed.). Los Angeles, CA: Sage.
- Wolff, R. D., & Resnick, S. A. (2012). *Contending economic theories: neoclassical, Keynesian, and Marxian*. Cambridge, MA: MIT Press.
- Zinn, H. (2005). *A people’s history of the United States*. New York: Harper Collins.